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MUSIC INTERVENTIONS AND GENERAL WELLNESS**Dr. Gagandeep Kaur¹, Prof. Dr. Gurpreet Kaur², Dr. Ramandeep Kaur³ and Amandeep Kaur⁴**¹Music and Yoga Therapist, Government Senior Secondary School, Bham (Hoshiarpur)²Former Dean & Head, ³Assistant Professor, ⁴Senior Research Scholar, Department of Music, Guru Nanak Dev University, Amritsar**ABSTRACT**

Advancement in science and technology has brought forth heap of options for physical comforts but due to unhealthy living style, uncontrolled food habits, disappointments, frustrations in life, liquor consumption, smoking and drug addictions, undue tensions stress etc. has resulted in various physical and mental disorders. In curing such disorders, there is a standard treatment of medicine through, Allopathy, Unani medicine, Ayurveda and Homeopathy. There are some alternative therapies in practice which are though not a part of standard medical care, yet they are proved to be very effective in healing process of such ailments. These alternative therapies include Naturopathy, Aroma therapy, Acupressure, Accupuncture, massage therapy, Psycho therapy, Mud therapy, Sunrays therapy, laughter therapy, Color therapy, Yoga & Meditation therapy, Reiki therapy, Art therapy through dance, drama and music etc.

Music as an alternative therapy plays an important role in influencing all creatures of universe. The impact of music on human behavior has been already documented through various scientific experimentations.

Keywords: Music, Therapy, Brain, General, Wellness, Alternative.

Wellness is caring enough about life, making the necessary changes and finding the support to maintain your motivation consciously working on your relationships, life goals, and strengthening our potential skills and tools that enable you to choose wisely and become more competent etc. Mutually beneficial relationships with friends, family and colleagues who care about you encourage wellness and increase your self-respect and self-confidence. Tranquil time helps you

Relax and get beyond the distractions of modern life that prevent you from really knowing yourself. "We all need to lighten up and take ourselves (and our wellness) seriously. By adopting healthy lifestyle behavior and living in harmony with your surroundings you, will be on your way for achieve wellness and minimizing the risk of having any disease. A healthy diet and well-balanced supplement regimen are important elements for enhancing mood and supporting emotional well-being."¹

Wellness is more health than just being not sick. Well-being is more related to your feelings and mind. Wellness is more comprehensive viz. physical, intellectual, emotional and spiritual aspects. Wellness approaches life from the perspective that we all function at four levels; the physical, intellectual, emotional and spiritual.¹ Each of these aspects/levels put-on impact on our well-being. The physical level focuses on physical body, health and sickness, need for diet and nutrition fitness and exercise. The intellectual level focuses on the mind, its health and sickness, the impact of thought on a one life and the impact of other's thoughts on us. The emotional level addresses issues of emotions, stress, relationships and social aspects. The spiritual level teaches the relationship with God in developing a philosophy of the purpose of your creation on this earth. It means physical wellness promotes healthy lifestyle behaviors including proper medical care and self-care. Intellectual wellness encourages ongoing education and expanding your awareness of the world around you. Emotional wellness enables to form interdependent relationships with others. This spiritual wellness helps us to deal with life challenges and ongoing changes.

ALTERNATIVE THERAPIES

Today's advancement of science and technology has brought forth heap of options for physical comforts for physical and mental health. Due to unhealthy living style, uncontrolled food habits, disappointments, frustrations in life, liquor consumption, smoking and drug addictions, undue tensions stress etc. has resulted in various physical and mental disorders. In managing and curing such disorders, there is a standard treatment of medicine through, Allopathy, Unani medicine, Ayurveda and Homeopathy. There are some alternative therapies in practices too which are though not a part of standard medical care, yet they are proved to be very effective in healing process of such ailments. These alternative therapies include naturopathy, aroma therapy, acupressure, acupuncture, massage therapy, psychotherapy, mud therapy, sunrays therapy, laughter therapy, color therapy, yoga therapy, meditation therapy, reiki therapy, art therapy and music therapy (through dance, drama and music) etc.

Naturopathy

In Naturopathy natural, combined, balanced, constructive and nutritious food is considered in shape of enabling to seek good health as the food works as medical property in purifying the entire body system. This food includes wheat grass, unpolished pulses, seasonal fresh fruits, green leafy vegetables, sprouts, citric juices, salads, curd etc. Through these eliminative soothing, alkaline constructive diet plan (combination of acidic and alkaline) helps the patient in the treatment of various mental, social, spiritual and physical disorders in less time span.

Aroma Therapy

Blends of therapeutic essential oils are used as topical application for massage, inhalation or water immersion. There is no good medical evidence that aromatherapy can either prevent, treat, or cure any disease. There is disputed evidence too that it may be effective in combating postoperative nausea and vomiting.

Acupressure Therapy

Acupressure is a healing art of 5000 years old. It is a manual therapy technique that is used to relieve pain and muscle tension. Acupressure is performed using fingers gradually pressing onto key points around the body to manage pain relief and to promote muscle relaxation. The acupressure technique is used on trigger points within muscles and soft tissues. Acupressure is able to relax and heal various disorders such as Uncontrolled food habit, Liquor consumption and smoking, Cardiac disorders Hypertension, Diabetes, Constipation, Obesity, Stress/Depression, Anxiety, Distress, Frustrations, Insomnia, Arthritis and other joint disorders.

Acupuncture

Acupuncture targets the same points used for acupressure but with the help of needles. It is based on traditional Chinese medical theory. Most of the points are based on 12 main meridians and two of the eight extra meridians, total of 14 channels described in classical and traditional Chinese medical texts. Acupuncture is able to work on Headache, Depression, Nausea and vomiting including morning sickness, Pain in the epigastrium, face, neck, tennis elbow, lower back, knee, during

dentistry and after operations, Primary dysmenorrhea, Rheumatoid arthritis, Sciatica, Cervical and Lumbar Spondylosis, Bronchial Asthma, Insomnia.

Massage Therapy

It is a modality of naturopathy. There are seven fundamentals modes i.e., touching, stroking, rubbing, kneading, percussion, vibrating and joint moving which is done with the help of some body organs such as hand, fingers, elbow, knees forearm and feet movements. These soft movements are different in character according to disease. There are different lubricants used for undertaking massagelike powder massage, water massage, neem leaf massage, dry massage, rose petal massage etc. It is helpful in improving of blood circulation and preservation of immunity, health and overall strength of the weakened muscles tone.

Psycho Therapy

Psychotherapy also known as talking therapy is based on regular personal interactions with a patient to prepare him to changes, encounter obstacles, face problems in life and to achieve desired goals. Psychotherapy aims to improve an individual's well-being and mental health to resolve or mitigate troublesome behaviors, beliefs, compulsions, thoughts or emotions, and to improve relationships and social skills. There are numerous types of psychotherapy designed separately for children, adolescents, adults and aged. Psycho counselling's of performed adequately and methodically can enhance healing, curing, managing psycho- syndromes and mental diseases.

Mud Therapy

Mud therapy is very simple, cheap and effective treatment modality using clean mud taken from 3 to 4 ft. depth from the surface of the ground without any contamination of stone pieces, grass particles or chemical manures etc. Mud is one of five elements of nature which can have healing impact on the body. Mud can retain moisture and coolness for a longer time when applied over the body parts.

Sunrays Therapy

Natural light of sun is a gift of God for our good health and wellbeing. The sunlight helps to regulate the natural rhythms of our body putting an impact on our health in surprising ways. Exposure to the Sun's warm rays at a specific time and in a consistent manner can be quite beneficial and just as miracle. This therapy is quite able to heal various skin diseases and can help in uplifting mood swings and Warming up the body organs. Exposure to sun rays cum sunbath therapy is being used since ancient times due to its disease-fighting properties.

Laughter Therapy

Laughter yoga (Hasyayoga) is a modern exercise usually done in groups, with harmonies, direct eye contact and cheerfulness involving prolonged voluntary laughter which provides similar physiological and psychological benefits as spontaneous and intentional laughter often turns into real and contagious laughter.

Colour Therapy

Seven colours of sun rays have different therapeutic effect. These colours are-Violet, Indigo, Blue, Green, Yellow, Orange and Red. For being healthy and in treatment of different diseases, these colours work effectively. This is an effective therapy consists of seven colors blended with water and oil exposing to sun in shape of colored bottles and glasses which can give adequate relief from certain ailments.

Yoga Therapy

Yoga Therapy is one of the ancient fast healing therapeutic techniques which has emerged as one of the base popular practices in the west. The word "yoga" comes from a Sanskrit root "yuj" which means union, or yoke, to join, and to direct and concentrate one's attention. Yoga is recognized as a form of mind-body medicine that integrates an individual's physical, mental and spiritual components to improve aspects of health, particularly stress related illnesses. In recent decades, several medical and scientific studies on yoga proved it to be very useful in the treatment of some diseases. Studies have shown effects of yoga for many conditions, including multiple sclerosis, asthma, irritable bowel syndrome, lymphoma, hypertension, drug addiction, osteoarthritis, and mental health issues.

Meditation Therapy

Meditation is a traditional way to focus on the mind and a peaceful calm and stable quite manner with the help of an object or thought to achieve a goal. Meditation is practiced in numerous religious traditions. The earliest records of meditation (dhyana) are found in the ancient Hindu texts known as the Vedas. Meditation plays a vital role in the contemplative repertoire of Hinduism and Buddhism. Meditation may significantly reduce stress, anxiety, depression, insomnia and pain, and can enhance, peace, perception, self-concept, and wellbeing.

Reiki Therapy

Reiki is a Japanese form of alternative medicine known as uplifting and promoting healing. Reiki practitioners use a technique called palm healing or hands-on healing through which a "universal energy" is said to be transferred through the palms of the practitioner to the patient through encouraging, emotional, physical and spiritual healing.

Art Therapy

Art particularly music is the oldest form of expressions even older than language art. Music releases a chemical in brain called dopamine, which plays an important role in controlling the emotional responses. It is a neurotransmitter which sends signal from the body to brain and is able to induce joy, pleasure, happiness to boost the immune system. Music, dance, and drama therapy plays an important role in influencing all creatures of universe. The impact of music on human behavior has been already documented through various scientific experimentations. Music interventions can be used for stress reduction in a variety of settings because of the positive effects of music listening on both physiological arousal (e.g., heart rate, blood pressure, and hormonal levels) and psychological stress experiences (e.g., restlessness, anxiety, and nervousness). Music therapy has showed effectiveness in treating symptoms of various physical and mental ailments. It is also effective in cardiovascular conditions. Music has a great potential to leave an impact on human behavior. Music is mystical and incomprehensible. Dance steps drama-dialogue delivery activate inner feelings, hidden expressions and help to explore unseen potential.

Music Interventions and Expert Opinion

Music intervention is a complementary profession and one of the expressive therapies, consisting of a process in which a music therapist uses music and its different facets to help an individual through his motor skills, experiences and expertise.

Music therapy is the use of interventions to accomplish individual goals as an approved music therapy technique by using music experiences such as free improvisation, singing, listening, discussing and moving to music to achieve desired treatment goals. The use of music therapy in treating mental and neurological disorders is on the rise.

Referrals to music therapy services may be made by other health care professionals such as physicians, psychologists, physical therapists, and occupational therapists. Clients can also choose to pursue music therapy services without a referral (i.e., self-referral). Music therapists are found in nearly every area of the helping

professions. Some commonly found practices include developmental work with individuals with special needs, songwriting and listening in reminiscence/orientation work with the elderly, processing and relaxation work, and rhythmic entrainment for physical rehabilitation in stroke victims. Music therapy is also used in medical hospitals, cancer centers, schools, alcohol and drug recovery programs, psychiatric hospitals, and correctional facilities.

Music and General Wellness

The use of music delivered by head phones or tapes has been shown to be very effective in reducing the levels of anxiety and depression. It is also effective in cardiovascular conditions such as blood pressure and heart rate.

“Thambe (1994) had used music therapy as an integral treatment of the holistic health therapy-with the combination of Ayurveda, Yoga and Spiritualism, along with simple food and living style. Research was carried out by playing specific Ragas from Hindustani classical music for certain diseased and they proved effective in curing ailments-ranging from ordinary stomach ache to menstrual disorders and serious maladies like schizophrenia and epilepsy.”²

“Music can improve and sustain the outcome and quality of life by fastening recovery. According to Chopra, Deepak (1987) 'therapeutic musical interventions include betterment of physical, mental, emotional, social and spiritual components within a person, and facilitate restorative movement away from illness towards wellness.’”³

“When one hears music, the first thing which happens is an increase in the deep breathing leading to relaxation. The body produces more of serotonin in the brain which induces sleep.”⁴

“Music is used to divert one's attention when one is under depression, mentally disturbed and stressed and makes a person relaxed, restful or contented.”⁵

“Music is known to leave a leading effect on the human soul, as it leads to certain states; joyful or sad, more or less profound. The same thing is likely to happen to other species i.e., plants and animals. It is now an established fact that music helps all living organisms-from plants to birds, birds to animals and animals to man; to grow and rejuvenate.”⁶

Music Activate Brain Waves

A sound wave basically causes changes in air pressure as it moves through the air. Our ears respond to this information and our brain processes it into sound information. Music activates certain regions in your brains, which are involved in movement, planning, attention, learning and memory. Music also releases a chemical in your brain called dopamine. Dopamine is a chemical found naturally in the human body. It is a neurotransmitter, which sends signals from the body to the brain. Dopamine plays a vital part in controlling the movements of a person makes as well as their emotional responses which improves your mood and reduces your anxiety, Dopamine also induces pleasure, joy and motivation. Music boosts immune system. It can create positive emotional experiences which results in the secretion of immune boosting hormones. It allows severely brain injured patients to recall personal memories.

Music also relieves pain. Surgery patients who listen to music before, during or after their procedures shows reduced pain and need for pain relievers. And when surgeons listen to their favorite music their surgical techniques and efficiency improves too. Music helps in the production of a stress related hormone called cortisol. Cortisol enhances your brain's use glucose, its main energy source. Cortisol increases the availability of substance needed to repair damaged tissues. Chill-inducing music also enhances altruism in humans. The music that you enjoy to listen makes you nicer to others. And if you are a musician who enjoys playing an instrument. Your brain will fire symmetrically when you listen to music. Corpus callosum area in your brain will also increase in size. This is the area that connects the left and right hemispheres of the brain. A relaxing music can lower high blood pressure. And can help people suffering from migraines and chronic headaches. It reduces the intensity, frequency and duration of headaches. A study revealed that listening to music helps children suffering from epilepsy. It reduces the number of seizures in patients. Children pains perform well in maths after listening to music. Music therapy during labor can reduce postpartum anxiety and pain.

“Music boosts brain power. The brain seems to have an innate affinity towards sound, which is applicable to an organized sound that is music.”⁷

“Besides the enjoyment of listening to tunes or melodies, recent studies Shows that music can have a great healing impact on body and mind. It is believed that music stimulates the pituitary gland, whose secretions affect the nervous system and the flow of blood.”⁸

Brain waves respond to different types of music in different ways. Music of louder and stronger beat helps the brain to become sharper and alert. Slow music can bring the brain to a restful mood. Research has proved that music can bring long lasting improvements to the brain even when one stopped listening to the music.⁹

“Music boosts brain power. The brain seems to have an innate affinity towards sound, which is applicable to an organized sound that is music.”

Music Enhances Creativity and Problem-Solving Skills

“Music is a magical medium and a very powerful tool. Music can delight all the senses and inspire every fiber of our being. Music has the power to soothe and relax, bring us comfort and embracing joy. Wigram, Tony. & Jos De Backer (1999) viewed that it has the power to subtly bypass the intellectual stimulus in the brain and moves directly to our subconscious.”¹⁰

“Music helps to achieve a number of goals including improvements of communication, academic strengths, attention span and motor skills.”¹¹

“Music has a positive impact on the right side of the brain and it plays a vital role in enhancing creativity.”¹²

“Music is bestowed upon mankind by Nature for influencing the inner spiritual world and moral characters. It is an integral part of social and cultural life of the human beings since it is the strongest form of expression, feelings and is a powerful source of making all round development in the personality and intelligence of an individual.”¹³

“Music has the power to explore the realms that can't be accessed with words. It is a way of expressing the feelings and it is a common link between people of different cultures thereby bringing about a harmony of thoughts. Listening to music basically generates specific types of vibrations which move through the air and affects the human body.”¹⁴

CONCLUSION

Music is a magical medium and a music therapy can improve the duration and intensity of your concentration. Music can effectively raise the efficiency of performing repetitive work or tasks. Listening to relaxing classical music before bedtime can reduce sleeping disorders.

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GENETIC STRUCTURAL ANALYSIS ON RICHARD WRIGHT'S NATIVE SON

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Camp, Pune**ABSTRACT**

A work of literature presents the life which is based on reality. In other words we can even say that a work of literature is the representation of real condition of a particular time in which the author lived. Richard Wright's Native Son is one of the finest examples which portrays his real life condition.

The study attempts to apply Lucien Goldmann's theory of 'Genetic Structuralism' to Richard Wright's novel Native Son. Genetic Structuralism is an approach in 20th century literary criticism. It combines structural and extrinsic elements of literary work to get the clear picture of a literary work. Lucien Goldmann says that the study of both intrinsic as well as extrinsic elements of literary work is essential for the total understanding of the text. This research paper is aimed to analyse intrinsic elements of the novel, author's worldview, social background of Richard Wright with relation to the novel, the characteristic of the society when the novel has been published and the period when the author of the literary work lived. The research mainly focuses to take a quick look on how society influences the author's thought and perception.

Keywords: Genetic structuralism, Lucien Goldmann, intrinsic elements, extrinsic elements, author's world view, Richard wright, Native Son.

INTRODUCTION

Literature is considered as a real representation of the society. Literary works are basically the products of real life conditions of particular time. An author is influenced by the social, historical and cultural factors of his time and these experiences and values whatever he gains is echoed in his works. But this representation of social reality is not presented as it is by the author, he colours it with his imagination and presents it. The author in his literary works manifests his views which can delight as well as instruct the readers. In short this is can be called as authors world view. Richard Wright's *Native Son* is one of the seminal work in which the conditions of Black people of 1930's and 1940's have been presented. In this work he expresses the realistic picture of the plight of Black Americans, the humility, poverty, hunger, racism which they suffered under the system of white dominance. This paper will analyse intrinsic as well as extrinsic elements of Richard Wright's *Native Son*. It will also study author's world view which is presented in form of structure in the novel.

Lucien Goldmann and Genetic Structuralism

Lucien Goldmann was a Jewish-Romanian philosopher and Marxist theorist. He developed the theory of Genetic Structuralism. In this work he has explained his theory and also offers the method to analyse literary works. Genetic Structuralism is one of the 20th century critical methods which bridges the gap between the theory of structuralism and the theory of sociology of literature. It emerged as a reaction against structuralism as it only focused on the structure and intrinsic elements of a literary work and ignored the extrinsic factors of the text such as author's background, historical, social and cultural influences on the text. It pays attention on both intrinsic and extrinsic elements of a literary work.

Goldmann states that human beings in their life are influenced by three basic characteristics. First trait is man's tendency to adapt himself to his surrounding environment, a tendency of doing in a certain way called "rationality", which is the effort to respond to the problems which occur in their life. The second tendency is the human tendency to create the consistent patterns in their thought, behaviour, and feeling as a response to all the problem in their surroundings. The third is the tendency of human to alter and develop the structure of thought, behaviour and feeling that have been built before. The theory of genetic Structuralism stems from the concept of human facts. Human fact is an important structure.

Goldmann states that human behaviour is marked by his rational response to the problem which he experiences around his surroundings and humans are trying to blend and adapt in this environment. The theory reveals the authors worldview conveyed in the literary text by analysing the intrinsic as well as extrinsic elements of a literary work. Author's world view is the context which is the part of genetic structuralism which touches upon the idea, desires and feelings that unite a specific group, which author expresses in his work as a collective subject.

Intrinsic Elements of Native Son

Native Son is one of the best known works of Richard Wright which brought him name and fame in the literary world. It is considered as one of the important American novels. Characterization and setting play an important role in the novel. It shows how story develops. The story is set in Black- Belt in the south side of Chicago in 1930's and 40's when there was extreme racial indiscrimination. The environment plays major role in the psychological condition of Bigger Thomas. He sees White neighbourhood as an unapproachable world. In this novel, Wright portrays through the characters the dire condition of the blacks in American society where they experience extreme poverty, indiscrimination, and injustice. The novel tells the story of a black youth named Bigger Thomas who lives in an extreme poverty in one of the slum apartments in the south side of Chicago. He lives with his mother, brother and sister in an overpriced one room apartment. Through the black characters Wright tries to show how the racism has impacted the blacks. They stay in constant fear and anger. They have limited or no choice in front of them in terms of education and vocation. Racism have diminished Bigger Thomas's dream to grow in his life. He is ashamed of his family's poverty and he strives hard to keep his feelings inside him. This fear and is so much delved deep inside him that he is not able to understand Mary Dalton's (his White employer's daughter) Jan's (Mary's Boyfriend) good treatment. He never sees these two people as an individuals but sees them as undifferentiated "whiteness," a powerful, threatening, and hateful authority that denies him control over his own life and identity. He accidentally kills Mary Dalton but later takes pride in it as he believes that this incident has given him power to assert himself against Whites. Bigger Thomas serves as a powerful and disturbing symbol of black rage. On other hand his mother, brother and sister have accepted their living conditions and they live a life in constant fear.

Mary Dalton, her boyfriend Jan and lawyer Boris A Max who defends Bigger at his trial represent those progressive Whites who are concerned about injustices done for the blacks and stand up for their rights to be treated equally. Mr. Dalton, father of Mary and employer of Bigger Thomas is a real estate baron. He charges high rent from poor black tenants. The apartments which he has given for rent are in extremely bad state. He refuses to rent flats for the blacks outside the ghetto. On other hand does charity and donates money to black schools. He hires Bigger Thomas despite of his criminal record. Mr Buckley, a state attorney who is running for elections and Britten, an anti-communist private investigator hired by Mr. Dalton are viciously anti-communist and racist. They represent the voice of White power and racism.

The Plot of the *Native Son* is dramatic plot and written in third person limited dramatic structure mainly from Bigger's perspective. The story starts with the introduction of the life of Bigger Thomas, a young black man who lives with his mother, brother and sister in the rat infested one room apartment in the Black Belt of the South-side of Chicago. He along with his friends plan to rob Mr. Blum's delicatessen. He is hired as a chauffeur by Daltons, wealthy white family. Mary, the liberal, free thinking, modern daughter of Daltons and Jan tries to befriend with him but Bigger is not comfortable in crossing this line.

Conflict begins when Mary and Jan take Bigger to a party and they both get drunk. He carries Mary to her room and accidentally kills her when her mother, Mrs. Dalton comes into the room. He burns her body in furnace and puts the blame on Jan by telling that Mary has eloped with him. Another conflict arises when he kills his girlfriend Bessie.

Falling action occurs when Mary's ashes are found in the furnace and Bigger is arrested for the murder of Mary, His trial at the Court and Boris A Marx defending him in also is a part of falling action.

Resolution of the plot is when Bigger is punished by the court of law. He starts seeing Boris Max and Jan as individuals rather than a threatening force. He starts believing in himself.

The central theme of *Native son* is Race and Racism. As a result of racism the line is drawn between Whites and Blacks. Blacks not allowed to stay in White neighbourhood. They stay in a ghetto where the living condition is very pathetic. They lack educational opportunities, choices in their life, good job opportunities and better living conditions. They are treated as an inferior race and subjugated by the Whites. They have accepted their fate and live in the state of constant fear and hopelessness. In 1930's racial discrimination and prejudices were widespread throughout America. Racism and its impact on blacks is spread throughout the novel. Characters like Britten and Buckley looks at the blacks as an inferior race and treat them as inborn criminals. This racial indiscrimination has a huge impact on Bigger Thomas which makes him to use violence and even has a thought of it in mind. His violence emphasised when he brutally cuts into pieces the body of Mary Dalton and burns it in furnace. Later he rapes and murders his girlfriend.

Author's World View

Richard Wright is one of the well-known American writer. He son of Nathan Wright who was a sharecropper and Ella Wilson who was a school teacher. His parent were born after Civil war but his grandparents were born in to slavery and later were freed after Civil War. His father left him when he was five years old. He grew in utter poverty. His childhood in Mississippi Tennessee, and Arkansas shaped his lasting impressions of American racism. Majority of his works deals with racial themes where African Americans are suffering from discrimination and violence.

Author's world view is the author's manifestation of the social conditions of his social group. The author expresses his idea as a form of collective consciousness which emerges from the social and cultural situations that exists in the environment. It represents the notion and understanding of the society in his age. Through this worldview the authors expresses his thoughts and as a result a structure is formed.

In the age of Richard Wright there was extreme racial discrimination in the American society. Blacks were seen as an inferior race by the whites. Though Slavery was abolished in America in 1865 but their condition remained the same. Whites regraded Blacks as powerless and unskilled people. They had no choice in front of them with reference to education and choice of jobs. Black people were forced to accept jobs like servants, tenant farmers, chauffeurs and other type of low paid jobs. The Whites discriminated blacks on the grounds of education, employment, business etc. Irrespective of their financial status Blacks were not allowed to buy house in the White neighbourhood. Blacks were made to stay in ghettos and the condition of these ghettos were extremely bad. Because of this racial discrimination an imaginary line was drawn between the Whites and Blacks which neither of them dared to cross. All these societal conditions which were predominant during Richard Wright's age has been captured and presented in his novel. Bigger Thomas, the protagonist of the novel is the representation of the main theme i.e. the impact of racial discrimination on the minds of black people. He represents all the blacks who have faced hardships in their life and felt inferior in the White environment. Like the other blacks of the time Bigger had no educational choice in front of him. Because of his poverty and he was black he studied only till eighth grade. He was exempted from certain schooling. The job of Chauffeur which he gets is also not of his choice. Racism has extremely curtailed Biggers prospects in his life.

Racism has instilled anger, hatred and fear in Bigger's heart because of which he unable to see whites as individuals and keeps on suspecting Mary, Jan and Boris Max's good will. Blacks are tormented with the hardships and oppression and these conditions make blacks like Bigger Thomas to react with a violence.

CONCLUSION

According to Lucian Goldmann the novel is not only reflection of social realities but also expression of group attitudes. Richard wright through the novel *Native Son* shows the racial indiscrimination and its impact which was dominant in America during his era. He depicts poverty, violence, and discrimination on the minds of people and what can be consequences of it. By applying Genetic Structuralism theory for analysing any works helps us to understand that both intrinsic and extrinsic elements are important. The historical and environmental factors of each era have an impact on the structure of the work of that age. The age in which Richard Wright was living there was heavy racism in the society. The echoes of the same can be found in his works. Through his characters he portrays the impact of racial discrimination on the blacks, how their mental state is affected.

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BHAGAVAD GITA: THE SOLUTION TO GLOBAL CONTEMPORARY ISSUES IN HUMAN RESOURCE MANAGEMENT**Ms. Darshika M. Karia¹, Ms. Dhruti M. Karia² and Ms. Sachi Devang Shah³**¹Assistant Professor, Smt. K. G. Mittal College of Arts & Commerce, Malad (West), Mumbai²LL. M. Student, Kirit P. Mehta School of Law (NMIMS Mumbai), Vile Parle (West), Mumbai³First Year BMS Student, Narsee Monjee College of Commerce and Economics, Vile Parle (West), Mumbai**ABSTRACT**

Issues in Human Resource Management are mounting globally. There are issues related to skills shortages, recruitment and selection of the right manpower, retention of the dedicated and committed workforce, motivation and morale of the employees, leadership, work-life balance, stress and conflict in the organization, etc.

Problems are existent only till the solution is not looked for. Solution and problems are like day and night. After the night full of darkness, there is illuminated morning on appearance of the sun in the sky. Likewise, all the problems whether small or big have a solution undoubtedly.

According to Sri Aurobindo, the "Bhagavad-Gita is a true scripture of the human race a living creation rather than a book, with a new message for every age and a new meaning for every civilization." This is what Adi Shankaracharya thought of the Bhagavad Gita: "From a clear knowledge of the Bhagavad-Gita all the goals of human existence become fulfilled. Bhagavad-Gita is the manifest quintessence of all the teachings of the Vedic scriptures." Bhagavad Gita is The Song of God and therefore certainly the solution to all the problems.

This research study aims at understanding the lessons from Bhagavad Gita which is The Solution to Global Contemporary Issues in Human Resource Management.

Keywords: Bhagavad Gita, Human Resource Management, Global Contemporary Issues

1. INTRODUCTION

It is the known fact and experience of organizations across the globe that Human Resource Management issues are escalating to a great extent. Human Resource Managers are facing challenges like managing interpersonal relationship, talent retention, change management, employee health and safety, employee training, motivation and stress management. Issues faced by employees are also snowballing which includes discrimination, low motivation and job satisfaction, interpersonal conflict, communication problems, performance issues, stress, burnout, etc. In order to solve these problems, Root Cause Analysis is required. Root cause is internal and efforts are taken only externally to solve the issues in many cases.

Lord Shri Krishna says in Bhagavad Chapter 4, Verse 17:

कर्मणो ह्यपि बोद्धव्यं बोद्धव्यं च विकर्मणः ।

अकर्मणश्च बोद्धव्यं गहना कर्मणो गतिः ॥

The truth about action must be known and the truth of inaction also must be known; even so the truth about prohibited action must be known. For mysterious are the ways of action.

In order to solve the problems one need to know the truth about action (*Karma*), inaction (*Akarma*) and prohibited action (*Vikarma*). *Karma* is the auspicious action that is recommended by the scriptures, *Vikarma* is the inauspicious action prohibited by the scriptures and *Akarma* is the action that is performed without the feeling of 'I'm doing the *Karma*' and without the attachment to the fruit of action performed.

When in the organization employer/ manager and employees will know *Karma*, *Akarma* and *Vikarma*, problems will vanish for sure. Implementation of the lessons from Bhagavad Gita ensures co-operation, sensitivity, augmented motivation, commitment, dedication, improved quality of life, value-added working relations, work-life balance, job satisfaction and enriched job performance.

2. LITERATURE REVIEW

Several books and websites were identified and selected for the study. The overview of the related literature is enunciated as under:

THE BHAGAVAD GITA or THE SONG DIVINE, Gita Press, Gorakhpur, India (2002), Page no. 271, Lord Shree Krishna says in Bhagavad Gita: Chapter 18, Verse 23

नियतं सङ्गरहितमरागद्वेषतः कृतम् ।

अफलप्रेप्सुना कर्म यतत्सात्त्विकमुच्यते ॥

That action which is ordained by the scriptures and is not accompanied by the sense of doership, and has been done without any partiality or prejudice by one who seeks no return, is called *Sattvika*.

According to Lord Shree Krishna- the Creator, *Sattvika* person is the one who performs the actions as ordained by the scriptures and is not accompanied by the sense of doership. Such a person will do actions without any partiality or prejudice and seek no worldly return out of it.

THE BHAGAVAD GITA or THE SONG DIVINE, Gita Press, Gorakhpur, India (2002), Page no. 272, Lord Shree Krishna says in Bhagavad Gita: Chapter 18, Verse 24

यत्तु कामेप्सुना कर्म साहङ्गरेण वा पुनः ।

क्रियते बहुलायासं तद्राजसमुदाहृतम् ॥

That action however, which involves much strain and is performed by one who seeks enjoyments or by a man full of egotism, has been spoken of as *Rajasika*.

According to Lord Shree Krishna- the Creator, *Rajasika* person is the one who performs action which involves much strain and such a person seeks worldly enjoyments or the action is performed by a man who is full of egotism.

THE BHAGAVAD GITA or THE SONG DIVINE, Gita Press, Gorakhpur, India (2002), Page no. 272, Lord Shree Krishna says in Bhagavad Gita: Chapter 18, Verse 25

अनुबन्धं क्षयं हिंसा मनपेक्ष्य च पौरुषम् ।

मोहादारभ्यते कर्म यत्तत्तामसमुच्यते ॥

That action which is undertaken through sheer ignorance, without counting the upshot, loss to oneself, injury to others and one's own capacity, is declared as *Tamasika*.

According to Lord Shree Krishna- the Creator, *Tamasika* person is the one who performs actions through sheer ignorance, without counting the upshot, loss to oneself, injury to others and one's own capacity.

3. RESEARCH OBJECTIVES:

1. To understand and take lessons from Bhagavad Gita to have solution for the global contemporary issues in Human Resource Management
2. To explore the implication of lessons from Bhagavad Gita implemented on Human Resource Management universally.
3. To present conclusion of the study and come up with recommendations with a view to present the importance and inevitability of taking lessons from Bhagavad Gita to solve global contemporary issues in Human Resource Management

4. LIMITATIONS OF THE STUDY:

The study is based on secondary data. However, data being collected from the spiritual book Bhagavad Gita ensures achieving of research objectives and thereby solves the purpose of the study.

5. RESEARCH METHODOLOGY

The study depends on the secondary data collected. The required data has been obtained from

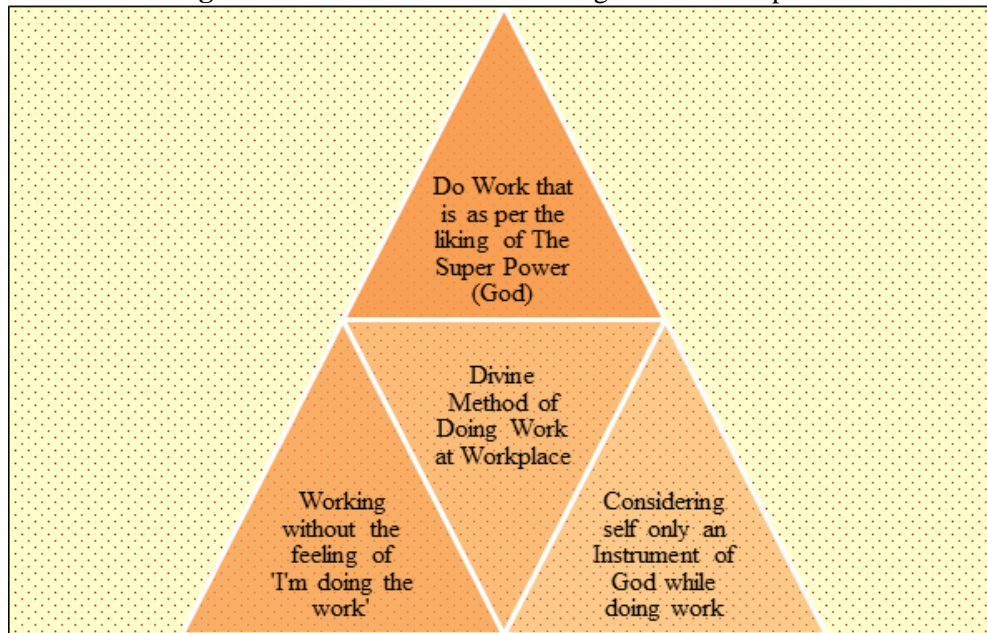
Spiritual book Bhagavad Gita, websites and lectures heard during JNANAYAJNA.

6. FINDINGS

6.1 Lessons from Bhagavad Gita to Solve Global Contemporary Issues in Human Resource Management

6.1. A Be Only an Instrument while performing Duties at Workplace

Figure 6.1.a Divine method of doing work at workplace



Source – Self-Compiled

Lord Shri Krishna says to *Arjuna* in Bhagavad Gita: Chapter 11, Verse 33

तस्मात्त्वमुत्तिष्ठ यशो लभस्व

जित्वा शत्रून्भुङ्क्ष्व राज्यं समृद्धम् ।

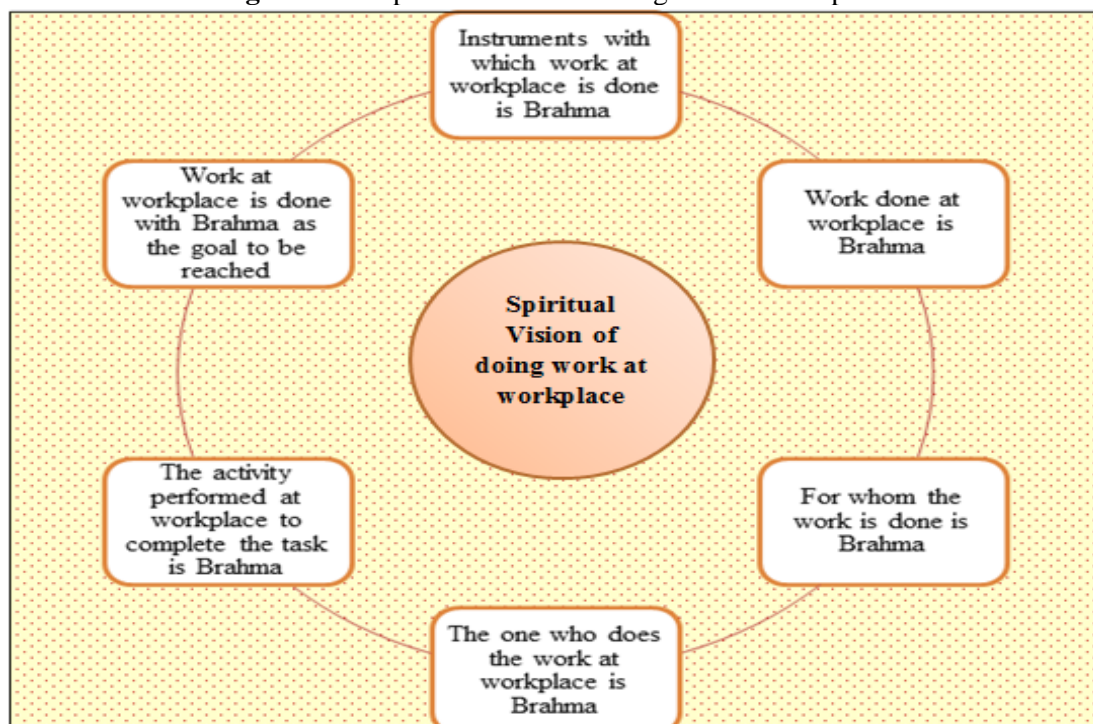
मयैवैते निहताः पूर्वमेव

निमित्तमात्रं भव सव्यसाचिन् ॥

Therefore, do you arise and win glory; conquering foes, enjoy the affluent kingdom. These warriors stand already slain by Me; be you only an instrument of my work, O *Arjuna*.

6.1. b See Everything as God at Workplace too

Figure 6.1.b Spiritual Vision of doing work at workplace



Source – Self-Compiled (*Brahma - God)

Bhagavad Gita: Chapter 4, Verse 24

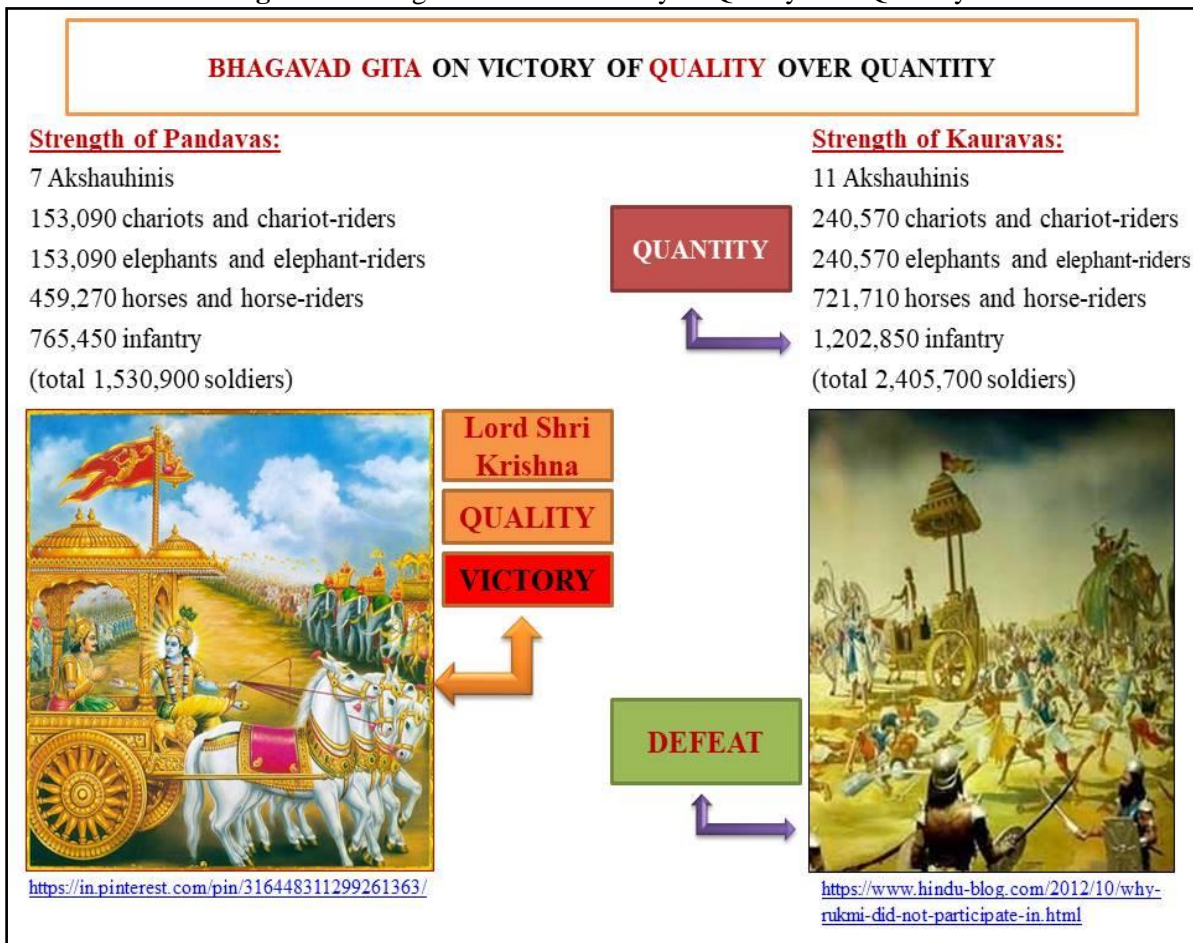
ब्रह्मार्पणं ब्रह्म हविर्ब्रह्माग्नौ ब्रह्मणा हुतम् ।

ब्रह्मैव तेन गन्तव्यं ब्रह्मकर्मसमाधिना ॥

In the practice of seeing Brahma everywhere as a form of sacrifice Brahma is the ladle (with which the oblation is poured into the fire, etc.); Brahma, again, is the oblation; Brahma is the fire, Brahma itself is the sacrificer and so Brahma itself constitutes the act of pouring the oblation into the fire. And finally Brahma is the goal to be reached by him who is absorbed in Brahma as the act of such sacrifice.

6.2 Implication of Implementation of Lessons Learnt from Bhagavad Gita on Human Resource Management at Workplace

Figure 6.2 Bhagavad Gita on Victory of Quality over Quantity



7. CONCLUSION

Even though technology is front-and-center in this day and age, victory can be achieved only by adding spirituality at workplace. The paper concludes that technological development is not enough, introducing new training methods is not enough, introducing new techniques of performance appraisal is not enough; spiritual approach in human resource management by implementing lessons from Bhagavad Gita is required to ensure efficient human resource management, welfare of all and economic growth which is the the solution to global contemporary issues in human resource management.

Sanjaya has said in Bhagavad Gita:

यत्र योगेश्वरः कृष्णो यत्र पार्थो धनुर्धरः ।

तत्र श्रीर्विजयो भूतिध्रुवा नीतिर्मतिर्मम ॥

Wherever there is Bhagavan Shri Krishna, the Lord of *Yoga*, and wherever there is *Arjuna*, the wielder of the *Gandiva* bow, goodness, victory, glory and unfailing righteousness are there, such is my conviction.

RECOMMENDATIONS

- ❖ Spread awareness regarding importance of having spiritual approach in human resource management by implementing lessons from Bhagavad Gita at workplace.
- ❖ Organize Conferences and Seminars on the subject of importance of having spiritual approach in human resource management by implementing lessons from Bhagavad Gita at workplace.
- ❖ Organize Brainstorming Sessions at workplace on topics related to importance of having spiritual approach in human resource management by implementing lessons from Bhagavad Gita.
- ❖ Add syllabus that imparts Higher Knowledge (Lessons from Bhagavad Gita) to the employees during training program.

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ADVANTAGE AND CHALLENGES TO ONLINE SHOPPING DURING THE COVID 19 PANDEMIC

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ABSTRACT

The situation of a COVID19 outbreak has turned out to be an opportunity for E-commerce services by online shopping. Hence the paper aims to elaborate the advantages being as a customer or employee and the challenges which were faced by them during the online shopping process in the harmful situation. In the lockdown period we are very aware of the situation of people and we all suffer from that, Because of the lockdown government restricts the people going outside the home, and that's why more people are moving towards online shopping? Based on that we collected data by Google form survey, Research analyses the role of COVID19 as a moderator variable in the relationship between customers and sellers, the online shopping connect each other being as a need. In the meanwhile, awareness of the COVID19 pandemic and marketing policies do not impact online shopping significantly during the COVID19 pandemic which is a conflict with previous research. The consumer gets more awareness about the online shopping for the groceries within a day, with the help of it the customers were getting several benefits by several different online shopping competitors. Benefits like: Safety, Convenience, Discounts, Ease of use, Wide product variety, More informal decision making, Time savings etc. In what time they receive their products, their quality, return exchange policy, and their online buying preferences and behaviour about the products and services in the post pandemic that we study in this research paper. It makes a company understand the consumer behaviour and needs which would be fulfilled by them as a seller.

Keywords: COVID19, Behaviour of the customer, Online shopping, E-commerce Direct feedback, Different online shopping apps, Trust about the online shopping, Correlation, Multifactor analysis.

INTRODUCTION

The pandemic makes it very clear that starting an online shopping service is to make a profit and fulfil the customers' needs by fulfilling their demand. Online shopping means we get products directly from the seller through the internet. In online shopping people get more options to choose the products. Nowadays online shopping is most popular, as is the popular internet application or social media Apps most of the Modern people and youngsters are moving faster towards the online shopping. That's why in 21st century online shopping becoming most important part of the people's life who are with the busy schedule of their life they find easiest and convenient mode of the buying products and services at homes within a minute with good quality of the product. Basically it was very common to do online shopping for their clothes, for their ornaments, furniture etc. But there were a number of people who were having a time shortage. So they order their groceries on an E-commerce platform. The average online platform time taken to deliver was 48 hours per week which means about 6.5 hours everyday. They planned a survey to know their customers point of view and their feedback so they can add some additional things which can help their product as well as their service to be more effective. As the professor Mr. Dominique Turpin said, in the old days marketing gurus used to say that the customer is king. Those days are over. The customer is now God. Basically the online platform makes it easier for the customers to communicate their opinions of product and services to the whole World, and buyers now relying on testimonials of customer experience your client have the potential to make or break your company. Production and Service make a customers come to you again and again and share the feedback to you as well as neighbourhood and surrounding areas. When the customer gets fresh Groceries, then people tell the people around them and their families that they too can take the facility of these and they let them know about the discounts.

Example: Free delivery, 40% off, etc. They try to attract their customers.

For Example

- 1) Identify your ideal client. It's easier to look for customers if you know the type of consumers you seek.
- 2) Discover where your customers live.
- 3) Know your business inside and out.
- 4) Try direct response marketing.
- 5) Build partnership.

6) Offer new customers discounts and promotions.

7) Recontact old customers.

Digital strategies contributed a lot to the reduction of COVID19. The strategy was adopted by many other companies, with some new aspects. Some implications would be suggested to both online sellers in setting suitable business strategies to adapt to change of customers as well as to support the government in setting suitable policies in the new context.

LITERATURE REVIEW

Edwin Gnanachas

According to him the lifestyle of the people had been changed. People don't like to visit the market. They feel uncomfortable as well as a waste of time rather than utilizing this time to somewhere else. Online stores are usually available 24 hours a day and many consumers have internet access both at work and at home. So it is very convenient for them to shop. So fifty responses were met and data were collected regarding their preference towards online shopping. He studies customers' performance towards online shopping, their values of and availability in the market. Because a variety of books are available while searching online webstores.

Kumar Amit, Amit Kumar Singh, Malsawmi

According to them, in the 21st century mostly people are busy so they prefer to do online shopping. Which obtained a very important position. The Internet has changed the ways consumers store, and has rapidly developed into a global perspective. His present paper is based on assumption of classical model behaviour. This paper examines the behaviour and perception of online customers in Aizawl. In free shopping or online shopping the companies have data of their regular or irregular customers. This can be done over online people and blogs that assist as marketing and advertising apparatuses and a basis of response for enterprises. Thus, the online selling increases more.

Tulsi Bharatbhai Raval

All of the businesses today as we see are done over the internet and anything which is not there is meant to be wiped off. Ecommerce evolved as business started to shift from red time market to digital market. The online shopping system being a prominent part of ecommerce has brought down political and physical barriers. It has become a substitute for the real marketplace. It helps to understand customer behaviour. They provide security to their customers and if they order again there will be details given. Even a "top-rated" website will not succeed if the organisation fails to practise common etiquette such as responding timely fashion, problems, being honest and being good stewards of the customers data.

SCOPE OF STUDY

- 1] Electronic shopping has become a large and important segment in the new digital economy over the last 10 years (Hostler, yoon, and Guimaraes, 2012).
- 2] The vast increase in e-shopping together with the development of information technology has had a profound impact on the world economy. E-shopping enables regional traders to be less local and more global and also reduces trade barriers. (sung, 2006)
- 3] The internet has become one of the most popular shopping channels and has changed customer's shopping habits, largely through rapid technological development. Online shopping is considered as the most convenient and easiest mode of shopping. (Abetare Prebreza, Blerona Shala)
- The authors (Berry, Seiders, & Grewal, 2002)
- 4] Defined online shopping as "a reduction of the opportunity costs of effort and time involved in shopping activities" .

The literature shows that behaviour of the online consumers is affected by different factors such as; Convenience, Pricing & quality, Saving time, and Trust. Nowadays online shopping is increasing widely in the market. The world's billions of people prefer to buy products from online shopping. Also they give their reviews on the product that they received so that other people get more information or they know more about the product or service that online shopping sellers provide to their customers. When the seller provides the good product or services to the customer their satisfaction level will be high and hence they repeat the order or their online buying decision. But if the customer is not satisfied with the service or product it negatively affects the customers buying decision and their dissatisfaction level will be high. Therefore it is important to the seller or online service provider to reach the customers requirements about the product and services. If they reach customers, they will be highly satisfied and their intention about the repurchasing will be positive.

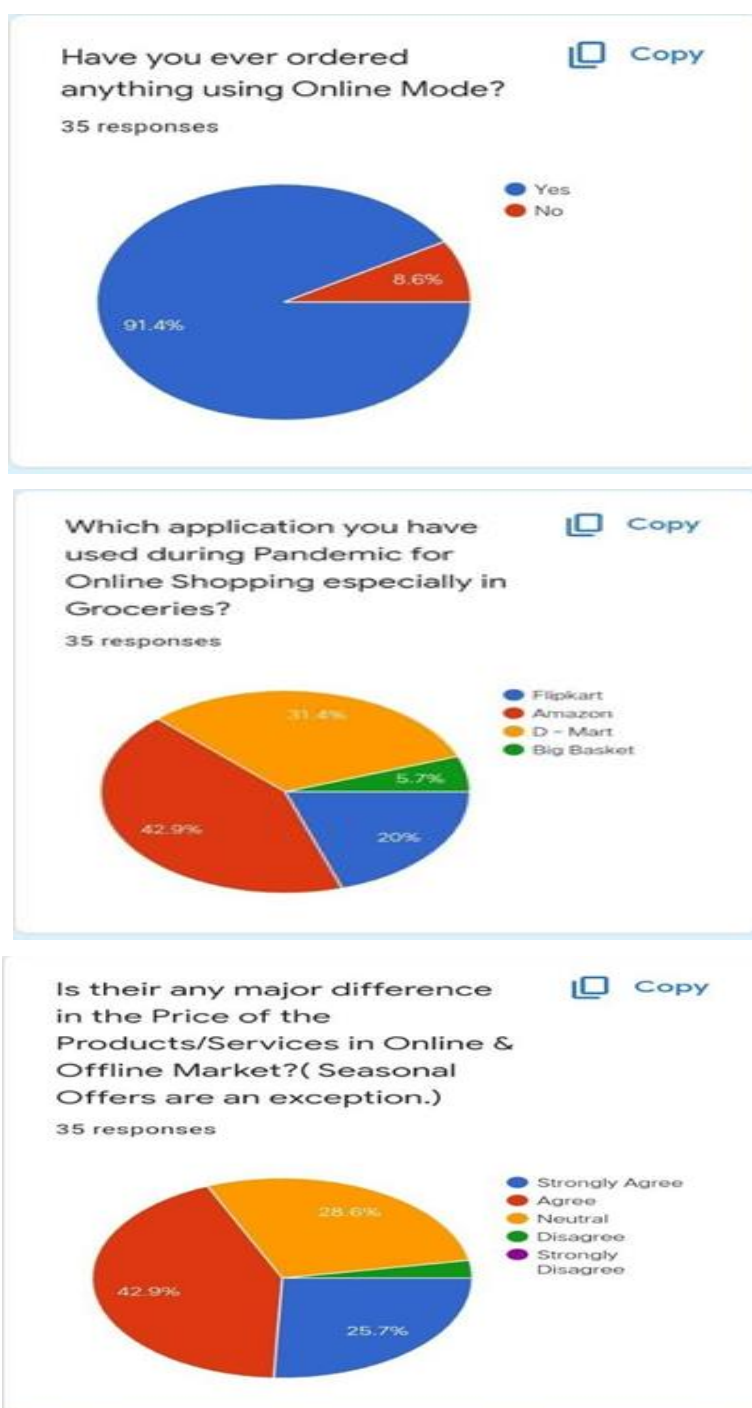
RESEARCH METHODOLOGY

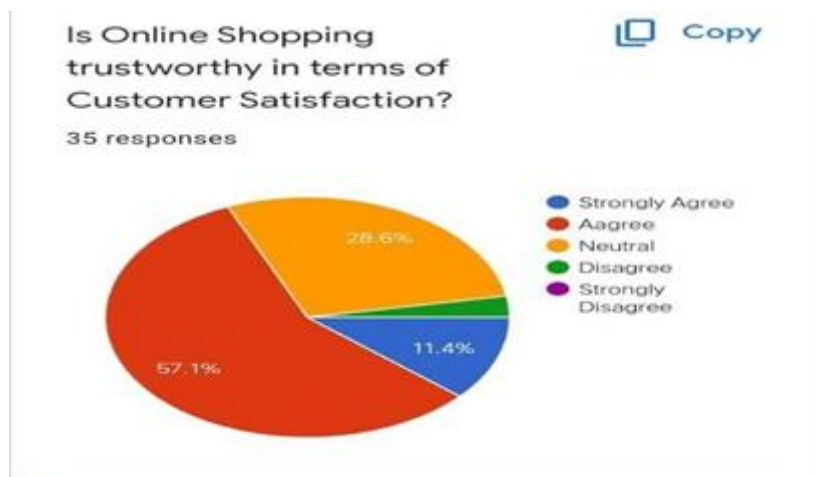
This research explores the difference between the perception of the consumers and the actual online shopping experience through direct and indirect e-stores. It was an experimental design in which online shopping was studied in developing countries. Data were collected from those individuals who shop from online channels; direct e-store and indirect e-store. Taking care of COVID19 standard operating procedures, only 35 respondents were gathered. The people who respond to this research consist of all buyers who have used online shopping during the first three months of the appearance of the COVID19 virus in our country. The research instrument of this study is the google form with 9 questionnaires as an easier tool to access with the respondents. The answers received have been quite encouraging. Below are the initiating questions where this paper is concentrated.

OBJECTIVES

- To study advantage to online Shopping During the COVID 19 Pandemic.
- To identify Challenges to E-COMMERCE.

FINDING DATA





DATA ANALYSIS

According to our research there are 91.4% of people are using ONLINE Shopping Mode and 8.6% of people are not using it because of an social awareness about online shopping Businesses.

Majority of people were agree that there are major changes in a price of the Products/Services

.After identify AMAZON was the major using app during pandemic for online shopping especially in Groceries .There are 75% of Female were using E-COMMERCE and there were only 25% of Male.

CONCLUSION

Summarising the main point, our research paper during the lockdown of the e-commerce platform has been increasing day by day. It makes people more aware about social uses of the internet, more informal decision making, Time saving, wide product variety, safety etc. have been provided by online shopping. It also reflect customer behaviour as they can give a feedback in a global platform, so the other can know the product well. It worked as a survival kit for the companies to get the profit and have a good customer base. The average online platform time taken to deliver was 48 hours per week which means about 6.5 hours every day. The government is setting suitable policies in the new context. We can also say that the lifestyle of the people has been changed. In the 21st century mostly people are busy so they prefer to do online shopping. These days the business as are done over the internet and anything which is not there is meant to be wiped off e-commerce evolved as business started to shift from red market time to digital market. Practice common etiquette such as responding timely fashion, problem, being honest and being good steward of the customers data.

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1. Have you order any thing using online mode?
 2. What is your perception about online shopping?
 3. Is there any major difference in the price of the product/services in the online and offline market ?
 4. Which application did you use during the pandemic for online shopping especially in groceries ?
 5. Is online shopping trustworthy in terms of customer satisfaction ?
 6. How are your experience regarding the quality of the product ordered through online mode ?

SOCIO-CULTURAL DIMENSIONS OF USING PROVERBS

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All languages have a repertoire of formulaic expressions such as proverbs, maxims and sayings which convey insights about life, human relationships and experiences. Since proverbs touch upon fundamental aspects of life, they are easily learned and are frequently used, being passed on from one generation to the next, thus becoming part of our commonly shared opinions and belief systems.

In whatever words or terms a proverb has so far been defined, the descriptions carry with them the approach that proverbs are expressions of popular collective experiences. It arises as a part of every discourse, which maintains that proverbs serve as impersonal vehicles for personal communication.

Proverbs has been and remains a most powerful and effective instrument for the transmission of culture, social morality, manners and ideas of a people from one generation to another. The reason behind the efficacy of the proverb is that it is an aphorism, a wise saying based upon people's experience, and is a reflection of the social values and sensibility of the people.

A collection of the proverbs of a community or nation is in a real sense an ethnography of the people, which if systematized can give a penetrating picture of the people's way of life, their philosophy, their criticism of life, moral truths and social values.

At the level of individual units of aphorisms, proverbs fits into the syntax of speech as a figurative expression, and a stylistic device with the desired semantic force. According to Cornelia Illie, proverbs like cliches are rarely called into question once they are finely established in language use, since they become part of the shared beliefs and values in a certain community. They can be universal to a certain extent, but their interpretation is also dependent on spatial and temporal factors, on culture and society, on class, education, gender, age and the context of communication.

One of the major tasks of a pragmatic analysis of proverbs is to reveal the connections between the cognitive processes of language users and their meaning negotiations concerning the social and moral implications that underlie the contextualised use of formulaic expressions. Understanding the social use of proverbs presupposes knowing how speakers and listeners carry out interpretive work. In using a proverb, speakers choose to formulate and communicate a point of view or a piece of advice by implication, without verbally articulating all its elements. Addressees can decode the meaning of proverbs through a process of inference that allows them to link what is actually said with prior patterns of understanding and to supply the unstated assumptions.

By recycling and contextualising easily recognisable beliefs, ideals and attitudes, proverbs play an important role in opening and establishing a dialogue between speakers and their interlocutors, and shaping socially and cognitively coherent audiences. A proverb is usually seen to start from and to summarise individual and/or social experiences which successive speakers consider to have been repeatedly confirmed by their own experiences over time. In general, differences between situations tend to be toned down, whereas similarities tend to be emphasised. As a result, the validity of proverbs is hardly questioned, in spite of the fact that they carry an important number of preconceived ideas and stereotypes.

Firstly, they have the authority of being processed in advance and secondly, of being known and used similarly by all the speakers. This way, they become a kind of 'imperative communication' their advantage being that nobody questions them. Because they are condensed formulae communicating universal wisdom whose occurrence in the discourse confers argumentative authority.

For example, we can think of some proverbs such as:

An Apple a Day Keeps the Doctor Away

The meaning of this statement is not achieved by identifying the semantical value of each word but by interpreting it as a whole. It is meant to induce the idea that eating an apple everyday can help to keep you healthy; another interpretation can be that a small preventive treatment wards off serious problems. When trying to convince a child to eat healthy food, the technique of using a proverb instead of explaining in many words the importance of a particular behaviour might be very efficient because nobody thinks of denying the truth implied in this proverb.

A Rolling Stone Gathers No Moss

This proverb lets the receiver the freedom of decoding the message according to the context of situation. one might understand it in the sense that if a person keeps moving from place to place, they gain neither friends nor possessions, or that by moving often, the person in case avoids being tied down. In this case the context is relevant for clarifying an ambiguous statement.

Better Lose the Saddle than the Horse

This is a 'double-bind' statement where the receiver is offered the chance of choosing the least harmful alternative of two unpleasant situations. It's better to accept a small loss, rather than continue and risk lose everything.

Proverbs as Classic Speech Acts

One of the most fundamental speech acts performed by proverb users is the speech act of stating. By examining proverbs (as locutionary acts) including their key words, in their actual social context we learn a lot about the speaker's communicative intention (conveyed by illocutionary acts) and the intended effect(s) on the audience (manifested in perlocutionary acts) as was first pointed out by Austin. Since it is in the process of performing speech acts that propositions acquire a variety of illocutionary forces, a fundamental line of enquiry in pragmatic analysis has normally been the performance of illocutionary acts. If a proverb can be regarded as a culturally defined speech act type, its illocutionary force becomes an instance of contextualised positioning (e.g. advising, warning, and reproaching).

If we examine this example from *Kanthapura* by Raja Rao, it becomes clearer:

Moorthy, the Gandhian, wants to garner support to form the village unit of the congress party. So, he goes to the most influential man in the village and that is the Patel (tax collector) named Patel Range Gowda. Moorthy learns from Bhatta the priest who is pro-British and thus anti-Gandhi and anti-Moorthy has already visited the Patel to enlist his support. The Patel however, is not convinced and relates the gist of his conversation with Bhatta as follows:

He wanted me to be his dog's tail. But I said to him, the mahatma is a holy man, and I was not with the jackals but with the deer. At which Bhatta grew so furious that he cried out that this holy man was a tiger in a deer's skin and said this about pollution and that about corruption and I said to him, 'So it may be but the Red man's government is no swan in a lake.' (Rao Raja, 1996: 74)

Thus, understanding a directive requires understanding not just of the linguistic message, but also people's relations with one another and the fact that people are, explicitly or implicitly, engaged in a permanent dialogue with each other.

Reinforcing Prejudices and Stereotypes

A common feature that is shared by all proverbs, whether universal or culture specific ones is the tendency of language users to regard them as absolute truths and to use them uncritically, thus reinforcing old prejudices and stereotypes. Since stereotypes become so familiar due to repetition and over simplification, they appear acceptable and unproblematic to many people. Through the stereotyping process, it is falsely assumed that all members of a culture share the same value judgements and behaviours. This is a very problematic assumption, since stereotypes do not apply to every single member of an ethnic or social group. It is therefore important to examine more closely the nature and validity of stereotypical representations and overgeneralisations conveyed by proverbs in order to find out whether they confirm or challenge current prejudices.

Let us take this example, A snake can cast its slough but not its poison. (Singh Khushwant, 1957: 37)

This proverb occurs in Khushwant Singh's *Train to Pakistan*. There is a dacoity in Mano Majra and Meet Singh is discussing the dacoity and subsequent killing of Lala Ram Lal with Iqbal, the social worker who is staying at the gurudwara. There is a general suspicion in the village that Juggat Singh, a dacoit hailing from the village is the culprit as he was missing from the village that night. Meet Singh says that Juggat Singh has been out of mischief since a long time-he was perhaps trying to reform his bad ways and earn his livelihood by farming but he had dacoity in his blood-his father and grandfather were dacoits. At this time he utters this proverb to reinforce the point that Juggat Singh could not avoid mischief just as a snake cannot cast away its poison. We as readers know as we have the benefit of a ringside view of the events that unfold that Juggat Singh is not the murderer and realise that this piece of ancient wisdom is prejudiced and not really applicable in case of Juggat Singh.

Equivalents in Several Languages

Proverbs are rooted in a community's traditional cultural heritage, social rituals and religion, but many of them have been also circulating across national and linguistic borders. This explains why many proverbs have equivalents in several languages, e.g., 'A bird in the hand is worth two in a bush', 'Need is the mother of invention; 'No smoke without fire'. 'All that glitters is not gold'; 'A friend in need is a friend indeed.

Every squirrel will have his day (Raja Rao 1996: 83)

This proverb is taken from *Kanthapura* by Raja Rao. Bhatta the priest of the village is troubled by the activities of Moorthy, and activist in the Freedom movement. Moorthy, a Brahmin breaks the traditions and conventions and freely mixes among the lower castes, thus breaking down the caste barriers which Bhatta hold very sacred. Most of the villagers support Moorthy and Moorthy thus usurps the central position that Bhatta had not so long ago held. In a sense Murthy challenges the very premise on which rests Bhatta's ideology. This angers Bhatta who mutters that 'every squirrel will have his day'. In other words, he will avenge himself in every way he can on Moorthy and his supporters. One could easily relate this proverb to, 'every dog has his day' thus giving it a universal appeal.

The idioms, phrases or proverbs are translated word for word from the mother tongue resulting in collocationally imbalanced sentences.

Khushwant Singh's, *Train to Pakistan*, "Of course, Chacha. Whatever you say is right to the sixteenth anna of the rupee," agreed Meet Singh' rubbing his belly. (Singh Khushwant, 1975:44)

The above utterance is in response to Imam Baksh's remark that one must have faith in God and the British too respect a person of religion. Meet Singh is in complete agreement with him and says, 'whatever you say is right to the sixteenth anna of the rupee'. It is a translation of the Hindi saying *Yeh baat solah anna sach hai*. There is a similar saying in Punjabi, *main tonu aagda payaa sola anne sahi hai*. This saying means that this is as true as the amount of annas (pice) in a rupee never varies so also this statement is the guaranteed truth.

In Raja Rao's, *Kanthapura*, the narrator is describing the location of Kanthapura, which is located on the hills, where there is cultivation of coffee, cardamom, rice and sugar. These items are commodities for trade and they are transported to the ports from where they are loaded on ships and taken to England, the ruling country of the erstwhile colonized India.

There, on the blue waters, they say, our carted cardamoms and coffee get into the ships the Red-men bring, and, so they say, they go across the seven oceans into the countries where our rulers live.

(Raja Rao, 1996:7)

The British are described as the red-men because the uniform of the British soldiers was red in colour. They go across the seven oceans, is translation of the Hindi proverb, *saat samunder paar jaana*, as well as Kannada proverb, *Yedu nadi gad annu paarudi ho dharu*. The meaning of the proverb is, to go abroad by sea way or to a very far off place, an unknown land. In this context it means that the coffee and cardamoms were taken to England by ship.

In Raja Rao's, *Kanthapura*, Bhatta is annoyed with Moorthy's popularity among the villagers and the forming of the Congress committee in the village. He had got Moorthy excommunicated from the Brahmin community for his mingling with the lower class people, but that had not made any difference to Moorthy's activities or his popularity. He realized that these political activities of Moorthy would invite the wrath of the British rulers on Kanthapura which would hurt his personal interests and he thinks of ways to stop this,

'Well, well he said to himself, every squirrel will have his day', and now for every Congress member the interest will go up to 10 and 20 percent.

(Raja Rao, 1996:83)

Bhatta decides that he would penalise all Moorthy's supporters and Congress committee by charging them heavy rates of interest. He would have his revenge on those of Moorthy's supporters who did not pay on time by taking them to court. *Every squirrel will have his day*, has no equivalent translation in Kannada but it is equivalent to 'every dog will have its day' meaning that he, Bhatta too would be successful at some time when the people would come begging to him for extending the time limit for repayment of their loans and he would not be moved.

Voice of the Ancients

Proverbs have a legitimising function. Their strength and authority lies in the assessment that they are the 'voice of the ancients' or 'sayings of the community' prescribing a 'mode of action' on the basis of 'past precedents' in relation to a 'recurrent social situation'. the user of the proverb utilises it as an analogy to propose and legitimise a mode of action. In an example from *Kanthapura* by Raja Rao,

Our Moorthy is like gold-the more you hear it, the purer it comes from the crucible (Raja Rao, 1996: 99)

Moorthy who is the most popular young man of the village has been arrested for his anti-government activities. He is a gandhian and an activist who mobilises the villagers against the British. This has brought him into disfavour among the authorities and a false case has been slapped onto him. While discussing with him, the goldsmith Nanjudia says this proverb to bring solace to all gathered that even though Moorthy is undergoing hardships, he will come out of the ordeal, a stronger person. Moorthy is held in high esteem by the villagers and therefore this particular proverb is able to express his purity of character, selflessness and superiority over the others.

In Shashi Deshpande's, *Roots and Shadows*, Hemant has been given all the organisational responsibilities for Akkas's final obsequies ceremony performed on the thirteenth day after her death. He is quite sure that after all the efforts he has put in, he will still be criticised for something or the other. He feels that the jobs he does are thankless. Hence, he says,

'Hemant gave a thin smile. I've done all that I can. But won't prevent the others from coming at the last moment and asking me. "Why haven't you done this?" and "Why haven't you done that?" I'm both the dhobi's donkey and the scapegoat here' (Deshpande, 1983: 53)

'I'm both the dhobi's donkey and the scapegoat here' is a translation of the Hindi saying, 'Dhobi ka kutta/gadha' which means 'I work like a washerman's donkey and Marathi proverb, 'bali chya bakra' -that is which means 'I am scapegoat' -that is if anything goes wrong I'm conveniently blamed for it though I've worked tirelessly like the dhobi's donkey.

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Socio-Cultural Evaluations

As repositories of popular wisdom, many proverbs encode particular social practices which are assumed to be commonly accepted and universally valid. At the same time, these practices are challenged and called into question by counter-proverbs. So, the ongoing dialogue among language users takes place both at the macro-linguistic level of discourse and at the micro-linguistic level of formulaic expressions.

Let us examine this example from Raja Rao's, *Kanthapura*, Moorthy has introduced the concept of non-violent protests and satyagraha to the villagers. One of the activities they carry out is picketing of the toddy booths. He explains his mission to the people but they are sceptical about its success. They feel that it is virtually impossible to reason a man away from alcohol. One of them says,

'You are right learned sir, but if you put a dog on the throne, he'll jump down on the sight of dirt' but Moorthy says, 'No you cannot straighten a dog's tail but you can straighten a man's heart'. (Raja Rao 1996: 140)

Element of Hierarchy

There is an element of hierarchy in the use of proverbs. They are used not only by an older person but also by socially and politically superior people to convey a message to the younger and inferior group. A course of action is also recommended. This is demonstrated in these examples from Raja Rao's, *Kanthapura*, We are out for action. A cock does not make a morning, nor a single man a revolution (Raja Rao 1996: 123)

The Ganges, sister, is born on the snows of the Kailas. (Raja Rao, 1996: 127)

CONCLUSION

We see that proverbs are frequently used in everyday language to support or summarise a point of view. Because of their illocutionary force, the polyphonic nature of their use and the way they operate at the cognitive level, the use proverbs is a powerful strategy in argumentation. It is significant to note that in uttering a proverb, each individual speaker adds his or her voice to the polyphony of large numbers of previous speakers who used the same proverb in various situations. Hence, each proverb user gets automatically involved in a continuous dialogue across time and space, during which multifunctional meanings of proverbs are continuously recycled and recontextualised. In actual communication a proverb often functions a wider socio-culturally situated dialogue. The speakers' familiarity with proverbs is often an asset in establishing common ground with the interlocuter and/or the audience when they engage in dialogue. But at the same time, this very common ground involves a risk in that proverbs become immune to criticism by acquiring the status of truisms. People seldom stop to call into question the validity of the assumptions and implications of proverbs that circulate as commonly shared sources of wisdom.

The proverb may be interpreted as a recommendation, an exemplification, a conclusive statement or a moral judgement. The use of proverbs invites language users to a continuously unfolding dialogue about conventionalised socio-cultural evaluations, about controversial issues or about pending decisions. It is hardly possible to envisage the utterance of a proverb out of context, or without relation to a socially situated discourse.

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STUDY ON MANAGEMENT OF CO-OPERATIVE HOUSING SOCIETY

Shantanu Shankar Pawar and Prachi Satish Tawade**ABSTRACT**

A co-operative is generally viewed as socio economic organization that can fulfil both social and economic objectives of its members and has welfare of its members. The co-operatives provide opportunities for capacity building for its members and service to the society. It is especially beneficially to poor farmers and weaker section of the society. The main object of the study is to evaluate the rights and responsibilities of members. The co-operative should be able to provide adequate and timely credit to cover the reduction. The overall health of co-operative society is moderate. Sometimes co-operative societies suffer from inadequacy of trained and skilled personnel. Priority be given to membership support, adequate training and education as well as management of co-operative society. Lack of awareness of the full benefits from cooperative societies is also creating disinterest among the participating members. Hence, Cooperative education to the youth and the general members is indispensable in order to get enlightened and responsible membership and to install the sense of belonging together through cooperative societies. A continuous educational network is highly required to sustain the cooperative spirit and to develop the sense of fellowship, association, loyalty, honesty and above all economic as well as social integrity amongst the people.

Keywords: Co-operative Housing Society, By-Laws, Role and Responsibilities, Society members

INTRODUCTION

A housing cooperative, housing co-op, or housing company, is a legal entity, usually a cooperative or a corporation, which owns real estate, consisting of one or more residential buildings; it is one type of housing tenure. Housing cooperatives are a distinctive form of home ownership that has many characteristics that differ from other residential arrangements such as single family home ownership and renting.

The corporation is membership-based, with membership granted by way of a share purchase in the cooperative. Each shareholder in the legal entity is granted the right to occupy one housing unit. A primary advantage of the housing cooperative is the pooling of the members' resources so that their buying power is leveraged, thus lowering the cost per member in all the services and products associated with home ownership.

Housing cooperatives fall into two general tenure categories: non-ownership (referred to as non-equity or continuing) and ownership (referred to as equity or strata). In non-equity cooperatives, occupancy rights are sometimes granted subject to an occupancy agreement, which is similar to a lease. In equity cooperatives, occupancy rights are sometimes granted by way of the purchase agreements and legal instruments registered on the title. The corporation's articles of incorporation and bylaws as well as occupancy agreement specify the cooperative's rules.

Housing Society means a society, the object of which is to provide its members with open plots for housing, dwelling or flats; or if open plots, the dwelling houses or flats are already acquired, to provide its members common amenities and service.

A co-operative society is an autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise.

Essentially, a co-operative housing society is a membership-based legal entity made of one or more residential buildings. You become a member by buying shares in the housing co-operative. In return, as a member, you get the right to occupy a housing unit in the society, be it an apartment or a house.

Subjects to the provisions of the Act, the Rules and the Bye-laws of the Society, the final authority of the Society shall vest in its General Body Meeting, summoned in such manner as is specified in these Bye-laws. The Management of the affairs of the Society shall vest in the Committee duly constituted in accordance with the provisions of the Act, the Rules and the Bye-laws of the Society. Subject to the direction given or regulation made by a Meeting of The General Body of the Society, the Committee shall exercise all powers, expressly conferred on it and discharge all functions entrusted to it under the bye-law No. 137.

A Banking Account shall be opened by the Society in the nearest State or District Central Co-op Bank / a Scheduled Bank having awarded "Audit Class in last three consecutive years,, Nationalized Bank, and in any other mode permitted by general or special order of the State Government, as provided under section 70 of the

Act and the account shall be operated upon and all acquaintances and discharges shall be signed by the Secretary jointly with the Chairman or Treasurer.

LITERATURE REVIEW

Dr. Gaurav Sehgal April 2014, "Cooperative societies- growth and development"

Dighe, 2014, Maharashtra Co-operative Society Act, 1960

Gupte and Divekar, 1999, considering the very fact that the co-operative movement through the MCS Act.

Jain and Bhatt, 2008 "Maharashtra possession flats.

Saroha and Yadav, 2013, the adequate and smart quality housing is a vital component of the country.

Agbo and Ugwuoke, 2013, this article reveals the subject of utile co-operative society (FMCS) of African nation.

Bapat, 2011 the objective of the author is to check the protection measures of co-operative society in Kaylan Dombivali municipality

OBJECTIVES

- To know the rights and responsibilities of members.
- To understand the duties of the committee.
- To study of problems faced by committee members.
- To understand the accounting process of co-operative housing society..

SCOPE OF THE STUDY

- The research was conducted in a random manner which may have affected the data collection.
- Most of the data was collected from residents of societies.
- Time period is an important parameter which was around 30 days only.
- The above study is conducted in the western suburb of Mumbai.

RESEARCH METHODOLOGY

Research methodology is considered as the nerve of the project. Without a well organised Research plan it is impossible to complete the project and reach to any conclusion. The project is based on the survey plan. The main objective of the survey was to collect appropriate data, which was important for drawing conclusion and getting results. Therefore, research methodology is the way to systematically solve the research problem. Research methodology not only talks about the methods but also logics behind the methods used in the context of a research study and it explain why a particular method has been used in the preferences of other methods.

RESEARCH DESIGN

A research design provides the framework to be used as a guide in collecting and analysing data. Research design is important primarily because of the increased complexities in the market as well as marketing approaches available to the researches. In fact, it is the key Evolution of the successful marketing strategies and programmers.

Source of Data Collection

The data for this study has been collected through both the primary and secondary sources.

Primary Sources

A close ended questionnaire having the option for suggestions has been used for primary data collection. Moreover, while getting the questionnaire filled up; related questions were also asked to the respondents.

Secondary Data

As a secondary data source - Books, Case Studies, Websites are been used to collect the data.

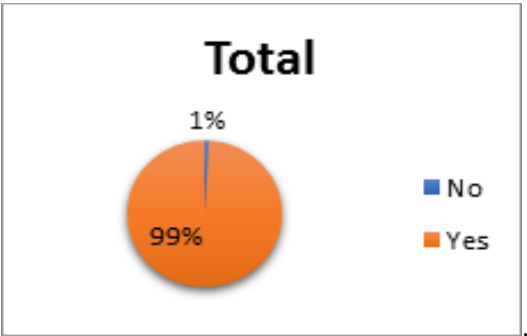
Details of the sampling methodology,

- ✓ No. of questions : 11
- ✓ No. of people met during the research :150
- ✓ No. of respondents during the research:104

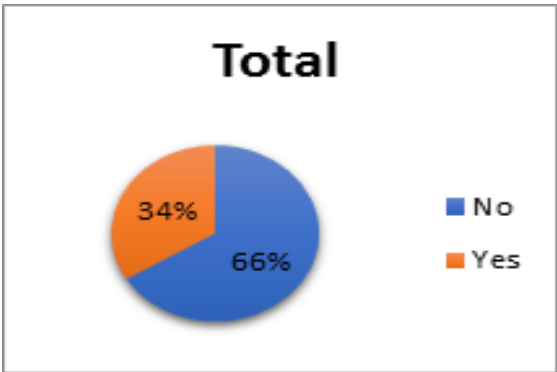
Sample unit: Professionals, Business-man, Employees, House-wife, working Women, Society members.

DATA ANALYSIS

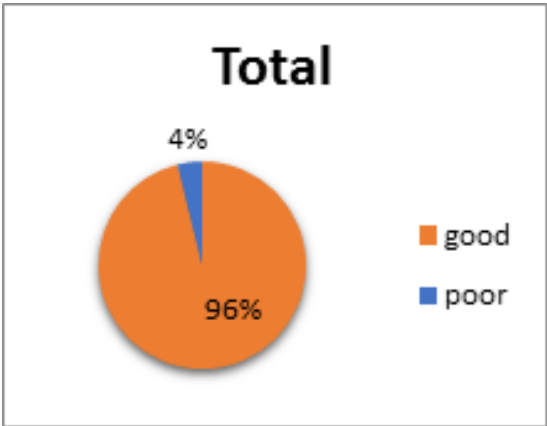
1. As member of co-operative society have you undertaken a community development work?



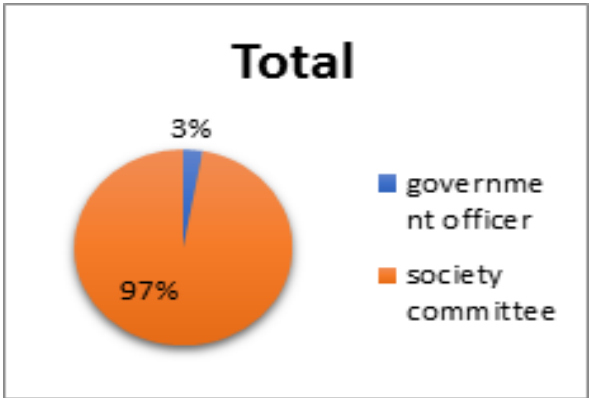
2. Does your organisation provide education and/or training to the member of the co-operatives societies?



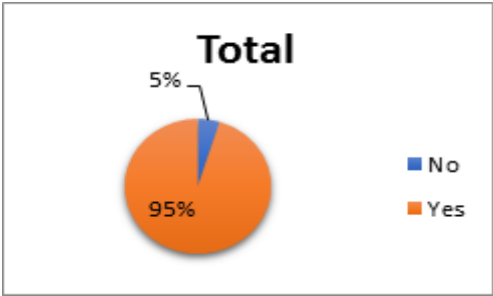
3. What is your opinion about the participation of the members in the day to day affairs of housing co-operatives?



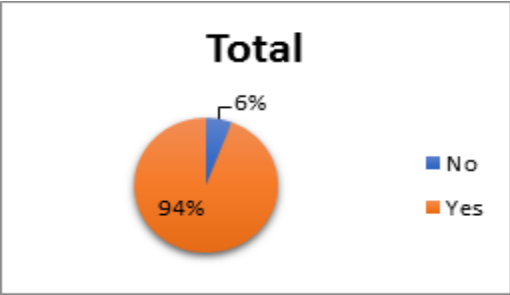
4. Does the society function under the board or the special officer?



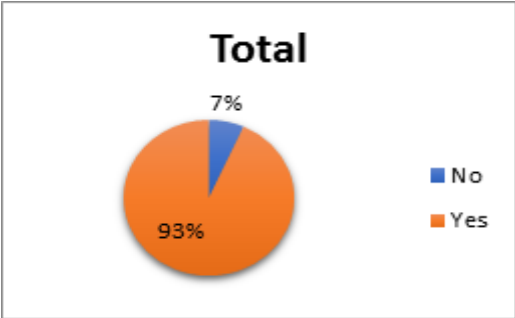
5. Whether the co-operative election is regularly conducted?



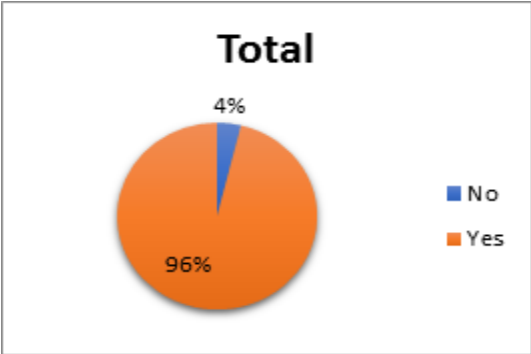
6. Do you have any interference by the government officials in the affairs of housing co-operatives?



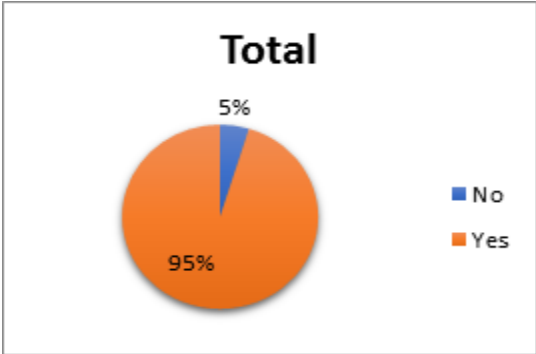
7. Are the annual general meeting conducted every year?



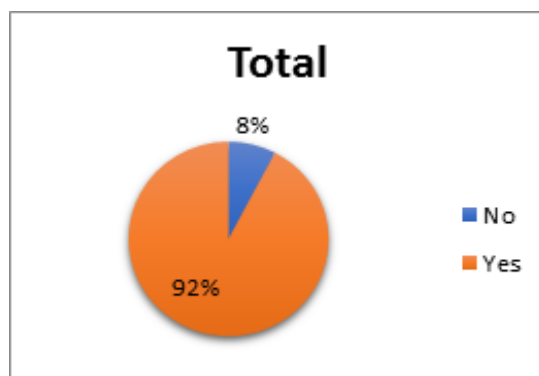
8. Are you aware about responsibilities of society member?



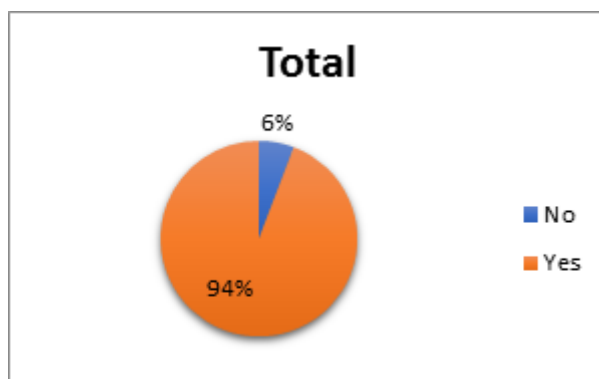
9. Are you aware about by laws provided to the co-operative housing society?



10. Weather the management of co-operative housing society is hassle free and society member friendly?



11. Are you aware about difference between active member, member, and nominal member?



CONCLUSIONS AND SUGGESTIONS

The good cooperative housing society is that whose functions are as per the recommended by laws and activities mentioned below:

Consider and confirm the minutes of the last meeting and of any other intervening general meeting;

Consider the auditor's report, the reports of the committee of management and any report made by the Registrar or his representative;

Approve the financial statements;

Consider and resolve the matter in which any available net surplus shall be distributed or invested subject to the provisions of this Act and the by-laws;

Consider and adopt any amendments to the by-laws;

Elect or remove members of the committee of management;

Appoint, where necessary, the auditors of the society;

Consider and determine the maximum amount the society may spend on developments and

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SALES AND DISTRIBUTION OF BOROSIL LABORATORY GLASSWARE IN WESTERN REGION OF INDIA

Shantanu Shankar Pawar

ABSTRACT

Laboratory glassware alludes to an assortment of equipment's utilized in logical work, and generally made of glass. Glass can be blown, bowed, cut, shaped, and framed into numerous sizes and shapes, and in this way used regularly in science, and systematic research facilities. Numerous research facilities have preparing projects to exhibit how glassware is utilized and set alerts to first-time clients about the risks associated with using it.

Laboratory glassware is regularly chosen by an individual responsible for a specific lab investigation to coordinate the necessities of a given undertaking.

Glassware is a normal appearance in the expert research center for subjects such as chemistry, physics, biology etc. It has a moderately lower prices, extreme robustness, and explicit degrees of precision. While some laboratory glassware is being enhanced with plastic or even ordinary kitchen materials, glass is as yet the standard material by which research center work is finished. While there are barely any principles about dish sets, there are some accepted procedures for utilize that set the preparation for good methods in the lab.

INTRODUCTION

Borosil-Glass-Works-Ltd. (BGWL) was set up in December 1962 in a joint effort with Corning Glass Works, USA, to produce borosilicate low development glass. In December 1988, Corning stripped its shareholding to the present Indian advertisers, who have been driving producers of sheet glass in India, since 1961. Borosil is the market head in research center crystal also, microwavable kitchenware in India. This company comprises of two segments -- Consumer Products Division (CPD) and Scientific and Industrial Products (SIP).

Borosil's Consumer Products Division (CPD)

It has more than 5000 retail outlets which sell glass tumblers, microwaves and flameproof kitchenware. They make these products in such a way that it is safe, dependable, and easy to use and at the same time has an elegant appearance. In India the kitchenware products made by Borosil, are mainly into microwavable glassware.

Borosil's Scientific and Industrial Products (SIP)

This division offers a wide scope of equipment including research facility dishes, instruments, expendable plastics, fluid taking care of frameworks and blast evidence lighting crystal, through a system of 150 sellers spread over the length and broadness of the nation. Quality, precision and reliability have become the signs of the Borosil brand. For a long time, Borosil has delighted in the trust of its steadfast clients that incorporate driving pharmaceutical organizations, R&D research centers, logical, wellbeing and instructive establishments. Borosil glass is utilized in more than 2,000 various items and applications, as assorted Microbiology, Biotechnology, Photo Printing, Process Frameworks and Lighting.

Borosilicate glass is thermally strong, the pollutions found in borosilicate and standard glass lead to a restricted temperature go and optical quality. Melded silica, or quartz, is utilized in circumstances where glass should be warmed over 450 °C an extremely high dissolving point over 1,600 °C. The most straightforward approach to differentiate between borosilicate glass and combined silica in the lab is to look down the long pivot of a bit of dishes. A greenish shading is characteristic of borosilicate.

REVIEW OF LITERATURE

Priya Shah et al. [2019], the authors studied about consistent quality improvement procedure through administrative rules like good laboratory practices (GLP).

Anjana S S [2018], the authors stated the exploration primarily centers to comprehend the purchasing behavior of buyers for corrective items. Through this paper an endeavor was directed to recognize the extraordinary factors that effect and impacts the clients for purchasing a item.

The American Association [2018], the authors examined scientific laboratory, there are additionally principal abilities that require acing before progressively complex assignments

Shailaj Kumar Shrivastava [2017], the authors this paper showcases the essentials of research facility well-being and brings up the most widely recognized sorts of security dangers in the science lab.

Dr Padmalatha N A and Prabhish Shresta [2016], the author investigated glass as one of the most well-known stockpiling and bundling items utilized today. It is moreover, perhaps the simplest item to reuse or reuse, moderating both regular assets and landfill space. It is 100% recyclable and can be reused never-endingly.

Eurachem [2016], the authors' of this book focus centers around the necessities of ISO/IEC 17025, anyway the substance ought to likewise be useful to associations looking for accreditation or confirmation against the prerequisites of norms, for example, ISO 15189 or then again ISO 9001, or consistence with the Principles of Good Laboratory Practice.

Shashi Prabha [2016], the authors mention about planned science instructors who should set up research facility encounters for vital piece of educating and learning of science all together to encourage understudies to support their regular interest.

World Health Organization [2011], WHO in this handbook, incorporates the term Health laboratories, that is intended to be comprehensive of clinical research centers, demonstrative labs, medicinal labs, open wellbeing research centers, creature and natural wellbeing labs or some other research centers performing testing with the end goal of sickness determination, screening, counteractive action, restorative treatment choices, reconnaissance or general wellbeing. Since all these terms for research centers are much of the time utilized reciprocally, the terms may in like manner be utilized conversely in this handbook.

LIMITATIONS OF THE STUDY

Development in worldwide glass is fundamentally reliant on the development of building development area, autos fabricating, laboratory equipments and instruments, the kitchenware and refreshment industry. Glass is one of the most generally utilized items in day by day families.

The research will have limitations in context of sample size because our study will focus the laboratory glassware and equipments sector. Also understanding the customer segment and partners associated with this market. Moreover, sample is limited to only western region of India whereas this kind of study can be done globally.

This research work will have two target audiences - individual customers and industry specialist (such as retailers and distributors) related to this field. The study will be limited to a sample size of 250 numbers within western region of India. The sample size will be divided as 200 individual customers and 50 industry specialist (such as retailers and distributors).

OBJECTIVES OF STUDY

- To understand laboratory glassware and other laboratory equipments manufactured by Borosil company.
- To understand the marketing and sales of the laboratory glassware within Borosil company in the western region of India.
- To understand the various sales strategies and marketing techniques used by Borosil company in the western region of India.
- To list out the different distribution channels or partners for laboratory glassware manufactured by Borosil company in the western region of India.
- To understand the different promotional activities used by Borosil company in the western region of India and to reach out potential customers.
- To understand growth opportunities for Borosil company in the western region of India in terms of laboratory glassware.

RESEARCH METHODOLOGY

Universe and Population

The universe shall be Western region of India. The study is strictly based upon the opinions of the first respondents chosen for the study which will be based on individuals and experts from the marketing and sales research work.

The research have limitations in context of sample size because our study will focus the laboratory glassware and equipment's sector. Also understanding the customer segment and partners associated with this market. Moreover, sample is limited to only western region of India whereas this kind of study can be done globally.

This research work have two target audiences - individual customers and industry specialist (such as retailers and distributors) related to this field. The study will be limited to a sample size of 250 numbers within western region of India. The sample size will be divided as 200 individual customers and 50 industry specialist (such as retailers and distributors).DATA ANALYSIS

Data Analysis is the most urgent piece of any examination. Data analysis abridges gathered information. It includes the translation of information accumulated using investigative and legitimate thinking to decide examples, connections or patterns.

Response Analysis Form 250 Consumers

The quality of glass in laboratory products does make an impact on consumer buying of laboratory glassware products

Opinion	Respondents	Percentage
Strongly Agree	158	63.3
Agree	58	23.3
Neutral	0	0
Disagree	17	6.7
Strongly Disagree	17	6.7
Total	250	100

Laboratory glassware product should be visually appealing.

Opinion	Respondents	Percentage
Strongly Agree	83	33.3
Agree	125	50
Neutral	42	16.7
Disagree	0	0
Total	250	100

Laboratory glassware products design should always help in the storage, use, and convenience. Choose your views

Opinion	Respondents	Percentage
Strongly Agree	125	50
Agree	107	43
Neutral	18	7
Strongly Disagree	0	0
Total	250	100

Packaging design plays an important role in consumer buying decision of laboratory glassware product and brand positioning.

Opinion	Respondents	Percentage
Strongly Agree	33	13
Agree	100	40
Neutral	42	17
Disagree	25	10
Strongly Disagree	50	20
Total	250	100

Borosil laboratory glassware has good availability of products in marketplace.

Opinion	Respondents	Percentage
Strongly Agree	125	50
Agree	83	33.3
Neutral	25	10
Disagree	17	6.7
Strongly Disagree	0	0

Total	250	100
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Borosil laboratory glassware products prices are fair as compared to other competitors in laboratory glassware products market?

Opinion	Respondents	Percentage
Strongly Agree	50	20
Agree	83	33.3
Neutral	75	30
Disagree	25	10
Strongly Disagree	17	6.7
Total	250	100

Borosil laboratory glassware products are duplicated by other competitors/ Local manufacturers and sold by the names of Borosil.

Opinion	Respondents	Percentage
Strongly Agree	28	11
Agree	103	41
Neutral	78	31
Disagree	25	10
Strongly Disagree	16	7
Total	250	100

Borosil give timely delivery of its laboratory glassware products as per the requirement.

Opinion	Respondents	Percentage
Strongly Agree	43	17
Agree	132	53
Neutral	43	17
Disagree	16	6.5
Strongly Disagree	16	6.5
Total	250	100

Borosil dealers provide timely service and delivery of its laboratory glassware products to its end users

Opinion	Respondents	Percentage
Strongly Agree	67	27
Agree	108	43
Neutral	50	20
Disagree	0	0
Strongly Disagree	25	10
Total	250	100

FINDINGS AND CONCLUSION

The study has revealed the impact of customer psychology associated with Borosil laboratory glassware products all socio-demographic factors. The study has measured the impact of strategy sales and distribution of laboratory glassware and others at borosil glass ltd. in western region of india.

The research study has identified the perception of customer towards the laboratory glassware of BOROSIL products. The study also indicates how the packaging of products influences the customers to buy them on the spot.

Thus, it may be understood that respondent's perception towards Marketing Strategy for sales and distribution of laboratory Glassware and others in Borosil Glass Limited in Pimpri, Pithampur, Vapi, Ankleshwar, Paithan, Sinner, Boisar, Lote, Ichalkaranji, Chikalthana, Dewas or Mandideep in states of Mumbai, Gujarat, Maharashtra, Goa and Madhya Pradesh and Chhattisgarh in Region of India is positive in general, as all the factors denote their positive perception being very effective for bringing desired changes in the society. In this chapter the collected data are analyzed with appropriate statistical tools Based on the analysis the researcher able to understand the role of sales and distribution of laboratory Glassware and others in Borosil

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A STUDY ON FOREX RATE PREDICTION

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ABSTRACT

Financial market forecasting is a difficult task. The term time frame, which is represented by exchange rate values of a real financial commodity, is used by most prediction algorithms. Such values (temporal window) serve as the foundation for forecasting future values. However, real-life examples show that predicting a single time-series trend is insufficient. This article proposes a novel and unusual approach based on the usage of multiple neural networks to forecast likely future trends described in a prediction time window. The suggested method is based on a good representation of the training-set input data in neural networks. It employs a combination of FFT coefficients and strong output indications based on a histogram of the projected flow of the data. At the same moment, the specified currency pair enters the prediction in conjunction with three other currency pairs that are mutually interconnected. Apart from the proposed methodology, an important output of the papers is confirmation that Elliott wave theory is useful in the trading environment and delivers a significant profit when compared to conventional prediction techniques. This was demonstrated in the conducted experimental study.

Keywords: *Forex, Prediction, Neural Networks, Elliot Wave, Fast Fourier Transform (Fft), Economics, Finance, Forecasting.*

INTRODUCTION

Economic and financial systems are complex, dynamic systems because civilization generates events with a high degree of chaos. It is difficult to carry out our forecast in such instances. As a result, sophisticated procedures are applied to get better results. Soft computing approaches (fuzzy logic, artificial networks, evolution algorithms) are examples of such methods, which can be used alone or in combination. Neural networks and traditional time series approaches, for example, have been the topic of countless publications. The advantage of neural networks over more typical econometric models is that they can represent complicated, perhaps nonlinear relationships with no assumption about the underlying data-generating process. Projections of the future development of financial and economic indicators in macro and microeconomy, predictions of the prices of stocks and shares, commodities, indexes, currencies, and so on are the key uses in the economic and financial sector.

To begin, a financial time series is defined as a collection of chronologically recorded observations of a financial variable (s). Financial time series prediction is a very complex task as a financial time series shows these characteristics (Pradeepkumar & Ravi, 2018) : 1. Financial time series frequently act as a random-walk process, making the prediction almost impossible (from a theoretical point of view). 2 Financial time series are usually very changeable, i.e there is a large amount of random (unpredictable) day- to - day variations. 3. Statistical characteristics of the financial time series differ at various points in time as the process varies over.

Time series prediction is collecting previous observations of a variable, analyzing them in order to build a model that understands the underlying process of data collection, and then using that model to forecast the future. The application of artificial neural networks to financial forecasting is not novel. The following mapping is accomplished using a neural network:

$$y_t = f(y_{t-1}, y_{t-2}, \dots, y_{t-p}, \theta)$$

where y_t is the observation at time t , p is the number of prior values, θ is the network weights vector. Thus, for time series forecasting issues, the artificial neural network (ANN) is equal to a nonlinear autoregressive model. Several design considerations have a substantial influence on neural network forecast accuracy. These considerations include input variable selection, data preparation, and network architecture. There is no agreement on these criteria. Unlike traditional forecasting approaches, neural network algorithms may learn a nonlinear connection between key parameters without prior knowledge of the input data distribution. Atsalakis and Valavanis (2009). Many scholars have attempted to create various approaches to aid decision making in the financial market in recent years. There are several works in these scientific publications that investigate the application of neural network techniques to tackle financial market challenges. Several reviews of financial time series prediction using neural networks are provided, for example in Bahram Mirzai (2010), Elmslie and Outtaj (2018), Huang, Lai, Nakamori, and Wang (2004), Katarya and Mahajan (2017), Li and ma (2010), Tealab

(2018) and Yu Wang, Huang and Lai (2007), etc. According to Martinez, da Hora, Palotti, Meira and Pappa (2009), the majority of works have used successfully backpropagation neural networks for solving the financial forecasting problem, but the current research is primarily focused on financial time series forecasting with deep learning (Sezer, Gudelek, & Ozbayoglu. 2020). However, neural networks work as a black box because they do not show interactions with the environment to receive outcomes. The contribution of this paper is the prediction of financial markets using appropriately chosen FFT coefficients in order to represent important properties of time series, in particular salient market trends in different time frames. An equally important contribution is the results of an experimental study that confirms that the use of Elliott wave theory yields observable financial gains in real trading compared to the use of prediction independent of the conclusions of Elliott patterns. Literature research in this area is the subject of the next chapter.

RELATED WORKS

FOREX (Foreign Currency Exchange) is an acronym for the currency exchange market (Edwards, 2014). A ratio between two currencies is used to indicate an exchange rate. Exchange rates are one of the most important economic indicators in international monetary markets. Exchange rates are controlled by a variety of highly connected economic, political, and psychological factors that interact in a complicated manner. Various neural network-based approaches for FOREX price prediction have been employed in the literature, including recurrent neural networks, convolutional neural networks, deep neural networks, multilayer perceptrons, and so on. Serer et al. (2020) discussed the mechanics of developing such models in a thorough com from 1971 to 2004, neural networks were employed for FOREX rate tive assessment of hybrid models. The authors stated that their model is further effi Than, (2015) enforced a Deep Belief Neural Network and the for the purpose of vaticination the following wrencey exchange rates od tish Pound (GBP) and US Bone (USD) Brazilian Real (BRL) The scrived autosomes were compared with results from a multilayer perceptron (MLP, the ARMA model and the arbitrary walk (RW Authors stated that their proposed model had much more accurate prognostications than the other mades. After reviewing 26 colorful ANN-basest mongrels, the authors Prademar Ravi 2018) concluded that concerning the FOREX te vaticination, themulti-layer perceptron (ML) was the most often used architecture presumably because of its universal approximator property. In the work Calmhchuk and Mukherjee (2017), authors dealt with an overview of deep networks for prognosticating the direction of change in foreign exchange rates. They studied the capability of deep complication neural networks to prognosticate the change rates direction in FOREX cates. They stated that the recent success of deep networks is incompletely caused by their abday to learn abstract Tea tures from original data. The experimental study was performed uver exchange rates for the currency dyads EURUSD, GBP/ USD and PUSD. The stained experimental results demonstrated that used deep neural networks achieved significant bracket delicacy in prognosticating the detection of change in fex rates In Duria and Mohan (2019) presented a comprehensive review of deep literacy grounded mongrel soothsaying models during 1999-2019 Authors studied 14 different deep literacy based fiscal time series prognostications including prognosticate of FOREX rate. The ensuing sections describe the proposed model, give the achieved results, and bandy the meaning of those results.

THEORETICAL BACKGROUND

A) Fourier Transform

The fourier transform (FT) is an integral transformation converting the signal between time and frequency dependent expression using harmonious signals, i.e. The sin and cos functions, thus a complex exponential function in general. It serves to convert signals from the time area into the frequency one. The signal can be either in continuous or discrete time (Chu, 2008).

Definition: Let $f(t)$ be a real or complex function with a real variable t . Then its Fourier transform $\hat{f}(v)$ with a real variable v is defined as (2),

$$\hat{f}(v) = \int_{-\infty}^{\infty} f(t) e^{-2\pi i v t} dt$$

Where t represents the time and v represents the frequency. $|\hat{f}(v)|$ is often called the spectrum and states how much energy function $f(t)$ contains in frequency v .

The inverse Fourier transform is given by the relationship and converts the signal from the frequency domain to the time one:

$$f(t) = \frac{1}{2\pi} \int_{-\infty}^{\infty} \hat{f}(v) e^{2\pi i v t} dt$$

Therefore, $f(t)$ and $\hat{f}(t)$ create a Fourier pair representing the same underlying identity. If we generalize Equation 1 for discrete example, holding that the input signal $f(t)$ equals a sequence of complex numbers

$f(t_k) = \{f_0, f_1, \dots, f_{N-1}\}$, kde $f_k = f(t_k)$ pro $k = 0, 1, \dots, N-1$, then the Discrete Fourier transform (DFT) is defined as (4):

$$F_k = \sum_{n=0}^{N-1} f_n e^{-\frac{2\pi i}{N} kn} \quad (4)$$

A Fast Fourier Transform (FFT) is an effective algorithm to compute the discrete Fourier transform and its inverse. The most used FFT variant is the Cooley-Tukey algorithm (Chu, 2008), which recursively divides the DFT sizes $N = N_1 N_2$ into smaller transforms of size N_1 and N_2 . While taking grounds in the relationship (1), i.e. predicting future data based on the historical one, a fundamental problem with the time unit of the given financial series arises. Generally, time windows of 1 min, 5 min, 15 min, or 60 min are used. If we overlap the course in other time windows within the same time length, the result will obviously be the same course of the time series, yet it differs more as the length of the time window get smaller. In other words: the course is almost identical in lower frequencies whereas it differs in high frequencies, see Fig. 1. The FFT converts the time domain into the spectral domain, where the first coefficient, referred to as the DC coefficient, represents the DC component of the signal. All other coefficients, referred to as AC coefficients, represent the individual amplitudes of the frequency components of the AC signal. Using the FFT, we achieve relative independence of the used time window as well as we provide space for a variable time length, see Fig. 2.

B) Elliott Wave

Technical analysis is one of the known and interesting ways to analyze markets. However, it often splits traders as there are many approaches to how to read market graphs. Some focus on repeating patterns, others compare other parameters. But there is also a controversial, but functional, theory the theory of Elliot waves. It states that moves on financial markets show one feature, repetition. These moves are called waves. The whole theory can be beneficially used for any trading time interval, either short-term, medium-term, or long-term. Even the authors (Volna, Kotyrba, & Jarusek, 2013) applied this theory on other courses, particularly Volume courses, which denote the trade liquidity over a time unit. The authors showed that the Elliott Wave Theory can be applied and used on significantly different types of time series. Market cycles are reactions of investors to external factors or prevailing mass psychology. The result of the whole theory is that if one can correctly identify repeating shape patterns, they can predict future development.

Impulses and Corrections

Prices tend to fluctuate in impulse or correction waves. If we know in which wave the current price is and what the recent waves have been, it helps us predict the future development of the price. An impulse wave (1-2-3-4-5) is a significant price move connected with the trend. A growing trend achieves higher price levels as a move up is bigger than down, which appears between the waves up. Conversely, correction waves (a-b-c) are smaller waves appearing inside the trend. They can be seen in Fig. 3.

The overall idea is simple one should buy during reverse moves or correction waves in a growing trend and keep to an other impulse wave as long as the price grows. On the other hand, one should enter into a short position during correction waves in a downtrend and profit from another impulse wave downwards. The concept of impulse and correction waves is also used to determine the trend direction. If there are significant moves up with small correction waves in between followed by a noticeable move down, it signals the growing trend to end. As impulses appear in the direction of the trend, a significant move down, which is bigger than the previous correction waves and as big as the impulse waves up, it implies a trend going down. If the trend is going down and a huge wave up, which is as big as the previous wave down in the downtrend, appears, the trend has now turned into a growing one and traders should start looking for opportunities to buy in the next correction wave. The Elliott Wave Theory is based on the following principles: Each impulse is followed by a correction reaction. Five waves (1-2-3-4-5) in the direction of the main trend are followed by three corrections (a-b-c) or a 5:3 move • Move 5-3 terminates the cycle

An important finding is that the theory founder discovered that those moves are fractals. What does it mean? One impulse wave contains another five waves in a smaller scale. Let us have a structure of 5 waves in a one-week graph. According to the theory, each impulse wave will consist of 5 smaller waves while a correction wave will compose of another 3 waves. This process will be repeated again and again. Nowadays, the whole theory is much more complex and R&D has newly identified lots of rules and directions to follow when classifying waves to ensure correct the future predictions. According to the theory, wave 2 is 61.8% of the length of wave 1. Even next phases show this interesting ratio of impulse and correction waves. This ratio is often related to the so-called golden ratio. The Elliott Wave Theory as a whole is not an easy concept, but it requires time for understanding and even more for its correct use. Many traders use rules derived from the Elliott Wave Theory, combine them with other technical analytical tools, and thus increase the probability of a successful setting of their technical analysis (Chandar, 2019; Duan, Xian, Yang, & Zeng 2018; Volna et al. 2013).

C) Multilayer Artificial Neural Network

Each artificial neural network (ANN) composes of formal neurons that are mutually interconnected in a way that the output of one neuron is the input into (generally more) neurons. The most spread neural network model is a multilayer feedforward neural network, where neurons are divided into layers and connections between neurons lead only from lower to higher layers (Cain, 2016). Distribution and processing of information in the network is enabled by the change of the state of the neurons lying on the path between the input and output neurons. The neural network develops in time. neurons change their state, weights are adapted. There are many adaptation algorithms for multilayer neural networks (Cain, 2016), eg backpropagation (BP), back propagation with momentum, Levenberg-Marquardt algorithm (LMA) Quickprop, Parallel Resilient Backpropagation (Rprop) etc. The proposed model takes advantage of a multilayer feedforward neural network adapted by the Parallel Resilient Backpropagation (Rprop) method, thus we are going to describe this adaptation in more detail. Rprop belongs to currently the fastest available training algorithms. Its work is similar to backpropagation although the weights are updated depending on the error gradient sign (Prasad, Singh & Lal, 2013). The size of the weight change Δw_{ij} on connections between units i and j is determined as follows (5).

$$\Delta w_{ij}(t) = \begin{cases} -\Delta w_{ij}(t), & \text{if } \frac{\partial E}{\partial w_{ij}}(t) > 0 \\ +\Delta w_{ij}(t), & \text{if } \frac{\partial E}{\partial w_{ij}}(t) < 0 \\ 0, & \text{else} \end{cases}$$

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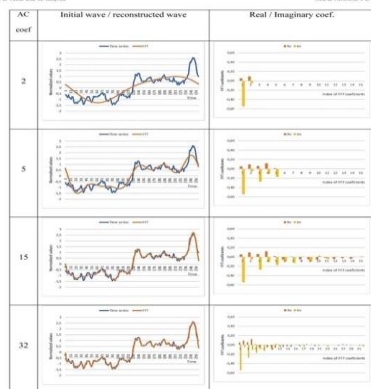


Fig. 1. Influence of the number of AC coefficients on the resulting wave approximation. The y-axis values are normalized according to (2).
where
 $\Delta w_{ij}(t) = \begin{cases} -\Delta w_{ij}(t-1), & \text{if } \frac{\partial E}{\partial w_{ij}}(t) > 0 \\ +\Delta w_{ij}(t-1), & \text{if } \frac{\partial E}{\partial w_{ij}}(t) < 0 \\ 0, & \text{else} \end{cases}$
Values of the increase and the decrease factors are set as follows:
 $\theta = \eta = 1$ or $\eta = \theta = 0.5$. Δw_{ij} is the initial value of the delta update value.
 Δw_{ij} The mean squared error function E (MSE) is represented as a distance between the target and the actual output vector (Prasad et al., 2013). The Rprop algorithm was selected for its advantages, namely accuracy, speed, and robustness.

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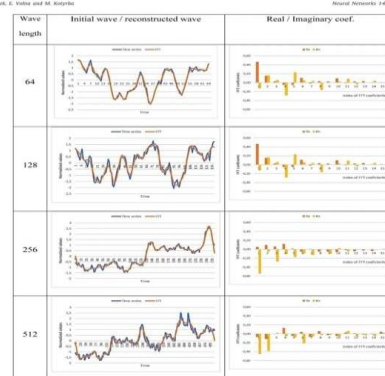


Fig. 2. Representation of a variable length of a window using 15 AC coefficients.

4. The proposed model
The objective of the proposed method is to develop a prediction system to estimate the EURUSD exchange rate at the FOREX market in a 60 minute time window. Training of the neural networks used input data in the form of 4 currency pairs belonging to the main rates and creating a closed cycle, i.e. EURUSD, USDJPY, CHFJPY, and EURCHF. The training included the development of the exchange rates in the period 2015-2018 (one minute intervals) out of which 30,000 time windows were

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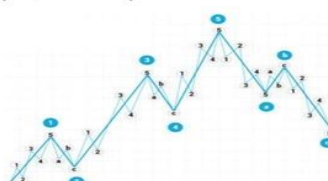


Fig. 3. Elliott Wave Theory.

selected (one window is 256 min). Then, the whole system was tested on randomly selected 300,000 unused developments in the period 2014-2020.

A) First Neural Network

The first neural network was trained on 30 figures of Elliott waves (EW), see Fig. 4, which were interpolated to a vector of 256 components. Each vector was subsequently normalized.

The topology of this network was 30-30-30, where 30 input neurons represent the first 15 AC coefficients representing the NN input vector (30 components). Since we use 30 basic EW patterns, the output layer includes 30 output neurons. The output neurons represent the similarity of the produced pattern with one of the learned EW. The adaptation took advantage of the BP algorithm with a hyperbolic tangent activation function and learning coefficient 0.1. the adaptation was terminated with an error $E < 0.04$ and t needed app. 38,000 iterations.

B) The Second Neural Network

Data Representation and Normalization

In order to be able to work with the data of individual pairs more, it was necessary to normalize it. We used a simple normalization form where a standard deviation was calculated over randomly selected time windows of 256 min and the resulting coefficient was calculated as an average of individual standard deviations, see Eq. (7).

$$N_{coef} = \frac{\sum_{i=1}^N \sqrt{\frac{1}{256} \sum_{j=1}^{256} (x_{ij} - \bar{x}_i)^2}}{N}$$

Where $\sum(7) 256$

N_{coef} is the normalizing coefficient of the selected currency pair (EUR/USD, EUR/CHF, USD/JPY, and CHF/JPY) N is the number of randomly selected windows of 256 values X is an element where i is the index of a randomly selected window, j is the index of the element in the window \bar{x}_i is the average value of the i th selected window A randomly selected window is then normalized according to (8)

$$x'_{ij} = \frac{(x_{ij} - \bar{x}_i)}{N_{coef}}$$

Where,

X is the normalized value of the element X_i is the real value of the exchange rate.

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Table 1

Real normalizing coefficients of individual currency pairs.

Currency pair	Rate (avg. 2015-2020) ^a	N_{coef}
EUR/USD	1.133715	≈ 0.000751633
USD/JPY	109.524268	≈ 0.077926068
CHF/JPY	112.075919	≈ 0.083936098
EUR/CHF	1.107702	≈ 0.000482892

^a[cit. November 6, 2020] <https://www.ofx.com/en-gb/forex-news/historical-exchange-rates/yearly-average-rates/>.

3 is the average of the selected vector Real normalizing coefficients N , average annual values of the exchange rate, and names of the used currency pairs are stated in Table 1 Thus, we obtained a tool for normalized representation of all 4 used currency pairs independent of the absolute values of their exchange rates.

Preparation of input vectors of the training set One of the fundamental visions of this work is an assumption that the Elliott Waves theory has real grounds and it can be successfully used in practice. Prediction of the proposed model is based on absorbing information from 4 parallelly developing exchange rates of 4 currency pairs in a window of 256 min. The Elliott theory states that if the given data shows a significant match with any of the EW figure, the future trend of the series will respond by a rise or a fall. Such vague information, however, does

not say anything about a real future development of the time series. According to the proposed methodology, it holds that if we find a significant similarity (90%) with an Elliott wave from the training set of the first neural network, then such a time window (256 values) will be included in the training process of the second neural network. As the Elliott theory is defined exactly over one time series, a suitable training set selection must be in accordance with a high similarity of the predicted pair with some of the EW. Yet, the learning process encompasses all 4 series of the currency pairs. We work on the assumption that all pairs affect one another and non-standard behavior in the development of one pair is more likely than non-standard behavior of all 4 pairs at the same time.

The core of the proposed method is a feed-forward multilayer neural network adapted by the RPROP method. It is known that these types of neural networks are sensitive to a pattern offset, which is an inevitable phenomenon of time series. We found out experimentally that native representation of any time course (Le a mere sequence of individual discrete values) significantly complicate quality adaptation. Moreover, a pattern offset (for example by 1 min) can lead to completely different results in the forward phase. Therefore, all input vectors were represented by a reduced set of FFT coefficients for each time window and all 4 currency pairs. We used a random selection of 30,000 training sequences over one minute intervals of the exchange rate development of the 4 currency pairs. The sequences were 256 60 min long and dated to 2015-2018, 256 min serve to predict the following 60 min in the exchange rate development and they equally cover the times periods of the financial series throughout the year. FFT was performed over all 4 currency pairs. If FFT of the predicted pair is similar to FFT of any EW by at least 90%, such a window is included in the training set for the second neural network, where each currency pair and it uses 15 AC coefficients. This results in the creation of an vector of 120 components ($4 \times 2 \times 15 = 120$ input neur This transformation is performed with respect to the following reasons:

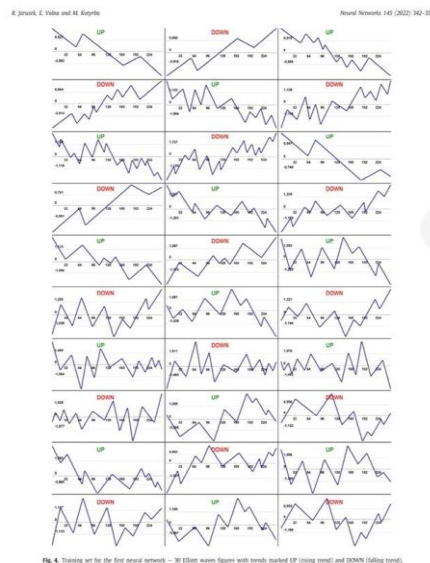


Fig. 4. Training set for the first neural network – 30 Elliott waves figures with trends marked UP (rising trend) and DOWN (falling trend).

- elimination of the time window offset impact
- Usage of only lower FFT AC coefficients keeps distinctive structural characteristics of time series and minimizes the impact of local extrema in time series (in fact it is analogy to averaging), see Fig. 1.

This approach is primarily beneficial as it eliminates the interpolation operation to the required number of input values into the neural network. In addition, such implementation corresponds with the theory of fuzzy markers where "the more significant and

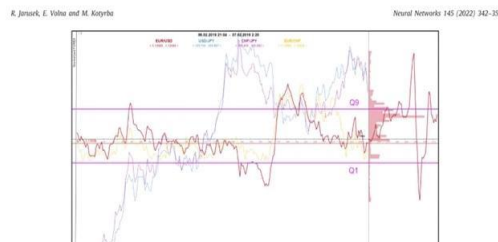


Fig. 5. Determination of the 1st and 9th percentile over the input values of the predicted currency pair (red color). (For interpretation of the references to color in this figure legend, the reader is referred to the web version of this article.)

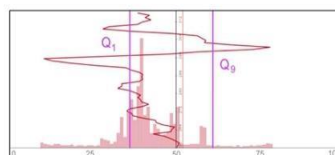


Fig. 6. Predicted time window. (For interpretation of the references to color in this figure legend, the reader is referred to the web version of this article.)

Longer the trend is, the higher the influence is on future price movements" (Xiao et al, 2019). Preparation of the training set output vectors

A frequent phenomenon is a situation when various prediction models represent their prediction only in one predicted development. According to our findings, it is an imperfection proving incomprehension of the given problem. A trend can rise or fall at one moment, but we presume that with a different probability. Thus, the output vector is constructed as a frequency histogram of the predicted wave occurrence in the predicted time window. The predicted part of 60 min was interpolated to 1200 points, which were then used to create a histogram of the development. In order to determine the histogram window (predicted part), we used the following procedure:

1. Determination of size of the output vector - histogram (selected $L=100$)
2. Ascend ordering of all values of the predicted pair output part (256 values), see Fig. 5 and finding the 1st and 9th percentile in the ordered sequence-Q and Q
3. Determination of the minimum and maximum histogram value according to formula (9)

$$\text{Min} = -2 \cdot (Q - Q_1)$$

$$\text{Max}_y = 2 \cdot 10 \cdot 0_1$$

4. For each point P of the interpolated predicted part (ie. 1200 points)
 - a. let us find a corresponding index of the output histogram (1) according to formula (10)

$$i_H = \text{round} \left((L - 1) \cdot \text{Max} \left(0, \text{Min} \left(1, \frac{P - \text{min}_H}{\text{max}_H - \text{min}_H} \right) \right) \right) \quad (10)$$

Where round (x) is a rounding function to the closest

Integer b. the histogram value is increased by 1.

5. The whole histogram is normalized according to the maximum value from L values of the output vector according to formula (11)

$$\hat{i}_H = \frac{i_H}{\max(H)}$$

The red color in Fig. 6 depicts real values of the time series whose development will be predicted. The histogram (light red color) represents normalized values of the predicted development, which is the output vector of the second neural network.

ADAPTATION

The resulting neural network with the hyperbolic tangent activation function has the topology 120-120-100-100. The RPROP method was selected for adaptation. The adaptation was terminated after 2000 iterations with a substantial error 1.5, the reason of an incomplete adaptation of the network can be primarily seen in the number of contradictory training vector (we require more different outputs to one input and the neural network tries to adapt in the form of generalization rather than to fully learn the given pattern) Zhang Rengin Hardt, Recht.

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We also experimented with other taking pl histogram line) is si of the gre (right to t

5. EXPERI

Objectives

algorithms The backpropagation method adaptation adaptation (Rumelhart, Hinton & Williams, 1986) was successful. but learning took an incredibly long time. The Levenberg Marquardt algorithm (Levenberg, 1944) terminated during the learning process by exhausting the system resources (it ran out of the RAM memory

Prediction process-actly phase The whole system was tested on 300 thousand randomly selected unused currency pairs dated 2014-2020 aiming at pre dicting the future development of the exchange rate of the given carency pair, eg. EUR/USD

The prediction process takes place in the following steps:

1. Time windows of 256 minute-size were randomly selected from the period 2014-2020 2. The time windows for all currency pairs were normalized ing a standard deviation used in the learning process Eq. (8)
1. The time windows were converted to FFE, see Fig. 1.
4. The first 15 FFT AC coef were used from each time window 5. If there was a 90% and more match of the first neural network (Elliott wave) with the predicted pair (Fig. 41 such a window was sent to the second neural network. The output of the second neural network provides a histogram of the predicted development.
6. The histogram is divided into 2 parts according to the last exchange rate value in the not-predicted (input) part, see Fig. 7.

a. If the count of the histogram values in the upper part (above the line of the last exchange rate) is signifi

Cantly higher (striking difference) than the count of the values in the lower part below the line of the last exchange rate, then we predict a rising trend. b. If the count of the histogram values in the upper part

(Above the line of the last exchange rate) is signify cantly lower striking difference) than the count of the values in the lower part (below the line of the last exchange rate then we predict a falling trend.

Fig.depicts FFT time series and Elliott waves from Fig 7 at

In F 7, four time windows of the currency pairs (EUR/USD EUR CHE, USD/JPY, and CHF.JPY) enter the prediction, the EUR/USD.

EUR/CHF, USD/JPY, and CHF/JPY) enter the prediction, the EUR/USD pair is depicted in red. The similarity of the development of this currency pair with an Elliott wave is 95% (the Elliott wave is in dark blue). The green color (histogram) shows the second neural network prediction in a 60 minute horizon for the predicted pair EUR/USD. The green figures indicate the count of areas above and below the last exchange rate value. Fig. 9 provides a detailed prediction of the future developmer of the currency pair. The green color represents the states the second neural network output neurons. The red color marks the real development of the time series and the red columns represent its histogram. In this particular case, the trading istaking place as the count of the areas (19.271) of the green histogram above the line of the last exchange rate (left to the red line) is significantly higher than the count of the areas (8.023) of the green histogram below the line of the last exchange rate (right to the red line).

5. Experiments - Trading System

Objectives of the Experimental Study

The experimental study was aimed at verification whether the real trading of the proposed system will generate profit or loss. It is essential to remark that the presented simulation does not count with trading fees required by most brokers. Next objective of the performed experimental study was to verify if the use of the Elliott Waves theory provides improvements in trading results. Therefore, the whole study was divided into two parts. The first part of selecting the suitable time for trading uses metrics based on the similarity of an Elliott wave to the values of the time series of the predicted currency pair. In the second part of the experimental study, the time for trading is selected randomly. Both the first and second parts of the experimental study take advantage of the prediction abilities of the second neural network. The parameters of the used neural networks are stated in Table 2.

In order to experimentally verify the proposed model, it is nec essary to create a basic trading system and trade with all recom mendations provided by the neural network. Based on such rec ommendations of the neural network, the trading system enters a short (selling) or long (purchasing) position. Each trading system should encompass the following four key components (Bhagwati, 2014):

Initial strategy. One of the crucial steps is to select a good initial point in the graph with the highest success probabil ity.

Stop Loss (SL) is a protection trading order to limit possible losses from an open position. This order is automatically executed when a certain price or loss level is reached. St is placed either to limit losses or to make

a profit. In our proposed trading system. SL. is set as a fixed value for sort and long position and it is invariable in the open position. Take Profit (TP) is a trading order terminating a trading position in a profit without trader's interference. The order is automatically executed when the price achieves a certain level. Money Management (MM) is a strategy telling the trader where to place SL and TP. Le. it determines the loss level that can be afforded in each trade, MM enables the p to control risks.

Parameters of the used trading systems are stated ble 3. The values of the SL and TP coefficients were determined. They stem from the fact that in a 60 minute interval, the average development of the USD/EUR exchange rate is equal to such values. In practice, trading takes place 20 min on average. The trading results are depicted in Figs. 10 and 11. The trading simulation includes 30.000 randomly selected trading positions from 2014-2020 and the simulation parameters are stated in Table 3.

Figs. 10 and 11 show that in the case of random trading (yellow color), we oscillate in areas close to a zero profit. During prediction without Elliott waves (green color) for a suitable trade, the trade continually rises, on average 1.1 dollar per trade. During prediction using Elliott waves (red color) for a suitable trade, the trade continually rises, on average 1.5 dollar per trade. It is obvious that using the EW apparatus brought a prediction increase (in USD per trade) by 39%.

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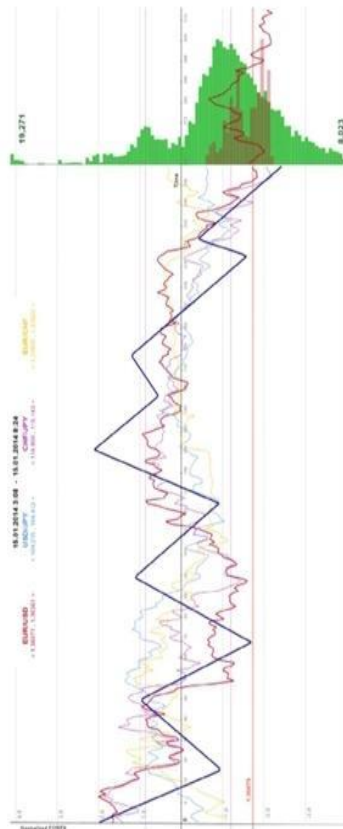


Fig. 7. Prediction of the second neural network. (For interpretation of the references to color in this figure legend, the reader is referred to the web version of this article.)

Table 2
Parameters of the used neural networks.

	Prediction with EW	Prediction without EW
Size of the training set for the 2nd NN	30000	30000
Size of the training set for the 2nd NN	300000	300000
Time period	2014–2020 (one minute intervals)	2014–2020 (one minute intervals)
1st NN topology	30–30–30	–
2nd NN topology	120–120–100–100	120–120–100–100
Training vectors selection	Based on similarities to EW higher than 90%	Random

6. Used metrics

Measuring the prediction accuracy (error respectively) is not an easy task since we cannot use any universal indicator. It is only based on the performed experiments that we are able to determine which key indicator is best for the solved task. In

the experimental study, we will determine the accuracy of the proposed prediction model according to the following metrics, which are usually used for these purposes (Gentle, 2009). Let $y = (y_1, \dots, y_T)$ be a time series, where T is its length and $\hat{y} = (\hat{y}_1, \dots, \hat{y}_T)$ are its predicted values, which are expressed in the same units as the original data.

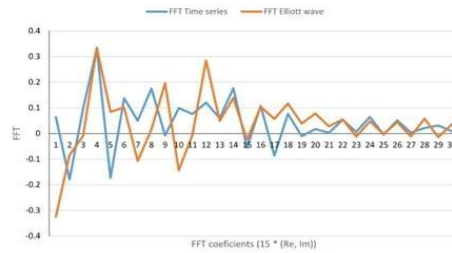


Fig. 8. FFT time series and an Elliott waves from Fig. 7.

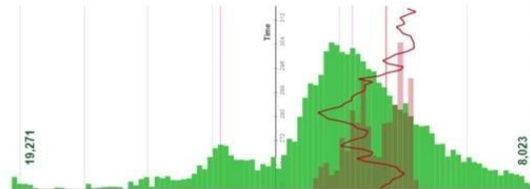


Fig. 9. Detail of Fig. 7. (For interpretation of the references to color in this figure legend, the reader is referred to the web version of this article.)

Table 3

Parameters of the used trading systems.

	Trading system with EW	Trading system without EW
Initial strategy	Similarities to EW higher than 90%	Random
Stop Loss	0.0005	0.0005
Take Profit	0.0005	0.0005
Striking difference	5	5
Money Management	Trade termination after max. 60 min independent of profit or loss.	Trade termination after max. 60 min independent of profit or loss.

- Mean absolute error (MAE) is expressed by the mean absolute error (12).

$$MAE = \frac{\sum_{t=1}^T |y_t - \hat{y}_t|}{T} \quad (12)$$

- Mean Square Error (MSE) expresses the prediction accuracy using mean square values of the differences between the predicted and real value (13).

$$MSE = \frac{1}{T} \sum_{t=1}^T (y_t - \hat{y}_t)^2 \quad (13)$$

where max represents the maximum value that a graphical pixel can acquire.

- Normalized Correlation Coefficient (NCC, $(-1, 1)$) is the cosine of the angle between two vectors (14).

$$NCC = \frac{y \cdot \hat{y}}{|y| |\hat{y}|} = \frac{\sum_{t=1}^T y_t \cdot \hat{y}_t}{\sqrt{\sum_{t=1}^T y_t^2} \sqrt{\sum_{t=1}^T \hat{y}_t^2}} \quad (14)$$

- The root-mean-square deviation (RMSE) represents the square root of the second sample moment of the differences between the predicted values and observed values or the quadratic mean of these differences (15).

$$RMSE = \sqrt{MSE} \quad (15)$$

The prediction accuracy of the proposed method was assessed using selected metrics. The results are stated in Table 4. MSE, RMSE,

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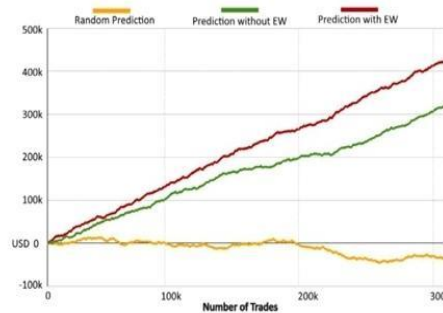


Fig. 10. Trading results. (For interpretation of the references to color in this figure legend, the reader is referred to the web version of this article.)

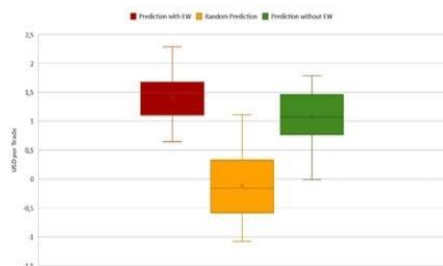


Fig. 11. Trading results. (For interpretation of the references to color in this figure legend, the reader is referred to the web version of this article.)

and MAE in % were calculated according to formulas (16), (17), and (18).

$$MSE (\%) = 100 \cdot (1 - MSE) \quad (16)$$

$$RMSE (\%) = 100 \cdot (1 - RMSE) \quad (17)$$

$$MAE (\%) = 100 \cdot (1 - MAE) \quad (18)$$

NCC in % was calculated according to formula (19).

$$NCC (\%) = 50 \cdot (1 + NCC) \quad (19)$$

The average prediction accuracy of the proposed method using selected metrics is provided in Table 4. The average prediction accuracy of the proposed method in % is 77%.

7. Comparison with other academic works

Concerning accuracy, our achieved experimental outputs are compared with other methods published in academic works; Table 5. This table provides average published values of the performed experiments. The accuracy ranges between 50%–72% in

Table 4
Average prediction accuracy of the proposed method using selected metrics.

MSE	MSE (%)	RMSE	RMSE (%)	MAE	MAE (%)	NCC	NCC (%)
-----	---------	------	----------	-----	---------	-----	---------

0.11	89	0.32	67	0.22	78	0.53	76
------	----	------	----	------	----	------	----

most cases. As systems in the cited works require different approaches, they are not mutually compared under the same experimental conditions. The authors of such works present the achieved results and they achieved better than random results. According to Garcke, Gerstner, and Griebel (2012), results over 55% are generally considered worth reporting.

8. Conclusion

Financial markets prediction is a complex task. This article aimed at using real examples to prove the benefits of the Elliott Wave theory in trading simulation in the environment of financial markets prediction. In addition, next objective was to present

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Table 5
Comparison of the proposed approach with other academic works.

Authors	Used method	Metrics	Accuracy rate (%)
Caginalp and Laurent (1998)	Statistic method	% of correct predictions	67
Lee and Jo (1999)	Expert system	% of correct predictions	72
Zhai, Huo, and Huijganage (2007)	Support Vector Machine	% of correct predictions	70
Philip, Tassili, and Bideri (2011)	Multi-layer Perceptron	MSE	70
Tiong, Ngo, and Lee (2013)	Artificial Neural Networks	% of correct predictions	59
Volna et al. (2013)	Elliott wave	% of correct predictions	61
Tiong, Ngo, and Lee (2018)	Artificial Neural Networks Dynamic Time Warping	% of correct predictions	71
Ooi, Ngo, and Lee (2016)	Multi-layer Perceptron Dynamic Time Warping algorithm	% of correct predictions	72
Septiawan, Aluhayati, and Dewa (2017)	Genetic Algorithm	MAPE	72
Ozerhan, Toroslu, and Selimoglu (2019)	Multiple Linear Regression	F-score	65
	Zig Zag Indicator		
	Clustering		
	Support Vector Machine		
The proposed approach	Elliott wave	Average of MSE, RMSE, MAE, NCC	77
	Fast Fourier Transform Artificial Neural Networks		

CONCLUSION

A real financial profit on a sufficiently large test samples when using the proposed methodology. A mistake of many prediction algorithms is that they predict only one development. However, practice shows that it is rather highly essential to determine the probability of either rising or falling trend at each prediction point. That was the reason to propose an innovative and unconventional approach based on suitable representation of the input data as well a robust output indicator. The whole apparatus works with the term histogram, which provides us with important information on the probability of a rising or falling trend of the predicted time series. An essential component of the proposed methodology is representation of the time development using FFT coefficients. It successfully minimizes the pattern offset problem, which is problematic in traditional feedforward neural network. At the end of the experimental part, we prove that the usage of the EW apparatus brings a significant improvement of the trading results, when the successfulness of the presented trading system achieves 77% on average. The whole work also suggests the possibility of forecasting in different time frames, because the representation of the time series by FFT coefficients is inherently independent of the time scale and also sufficiently robust to significant and unexpected market fluctuations represented by high values of AC coefficients, especially at high frequencies, which, however, do not enter the forecasting process.

Our future research will be oriented on extending the prediction methodology with other variants of configuration of the key system parameters, it primarily concerns the following areas:

Prediction over another selected currency pair. Prediction in a group of an arbitrary number of currency pairs.

Prediction over an optional length of the time window. Optimization of parameters of the proposed model (degree of similarity with EW, value of the striking difference of the histogram count, stop loss, and take profit) depending on the trading system.

Incorporation of trading charges into the trading system. • Verification of the trading model in real trading environment.

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INCLUSIVE POLICIES: SOURCE OF ECONOMIC CHANGE IN DEVELOPING COUNTRIES

Dr. Subhash D'Souza and Daizy Sobti³Vice Principal, St. Joseph College of Arts and Commerce²UGC, Pankaj Kumar Singh, Aggarwal College, Ballabgarh**ABSTRACT****1 INTRODUCTION**

Inclusive growth is a major prod area of millennium development goals adopted by U.N. In developing countries few selected section of the society have become wealthier and large section is poor. This would result in chaotic catastrophic situation and therefore attention should be given to adopt inclusive policies which will benefit deprived, neglected and outcaste sections of society to come in main stream of economic development.

2. OBJECTIVES:

1. To find out role of financial inclusive policies in developing countries.

3. HYPOTHESIS:

Inclusive policy is an instrument of economic transformation in developing countries

4. DATA COLLECTION:

The researcher shall collect data from allied sources of data (Secondary).

5. CONCLUSION:

Numbers of measures are being taken across the world for the economic development of people having poor financial background. Government and the regulatory bodies need to evolve distinct strategies for the implementation of inclusive policies.

1. INTRODUCTION

Inclusive Growth by its very definition implies an equitable allocation of resources with benefits accruing to every section of society. In simple words it is nothing but all financial bodies coming together and spreading finance access to each and every corner of the country. It's the process of reaching financial weapons to all the people across the countries.

Defining inclusive growth, rapid pace of economic growth is necessary for substantial poverty reduction and for the growth to be sustainable in the long run, it must be broad based across sectors and inclusive of large part of a country's labour force.

Promoting inclusive growth requires policymakers to address both growth and income distribution, so it requires an understanding of the relationships between growth, poverty and inequality. Economic growth is a prerequisite for poverty reduction when income distribution is held constant. The acknowledgment that inequality affects the impact of growth on poverty reduction has led to a broad agreement that it is necessary to look beyond a 'growth-first' agenda in order to successfully deliver inclusive growth.

Inclusiveness growth is a major thrust area of millennium development goals adopted by U.N. In developing countries few selected section of the society have become wealthier and large section is poor. This would result in chaotic catastrophic situation and therefore attention should be given to adopt inclusive policies which will help deprived, neglected and outcaste sections of society to come in main stream of economic growth.

2. International Scenario

Worldwide, the awareness of the importance of microfinance for the uplift of the poor has been growing over the year, as different countries are attempting to devise ways and means to enhance the access of the poor to credit facilities. As a result, an intense debate has erupted among the planners, bankers and officials of the government and Non-government organization as to how financial services can be provided to the poor in an effective, efficient and sustainable manner. A large number of people like employees of unorganized sector, slum dwellers, street vendors etc., are unfortunately neglected by the banking system for many obvious reasons like geographic exclusion, no asset, illiteracy, very low profit margin and so on

3. United Nations Main Goals of Inclusive Finance

Building an inclusive financial sector has gained growing global recognition bringing to the fore the need for

development strategies that touch all lives, instead of a select few.” In its landmark research work titled “Building Inclusive Financial Sectors for Development” (2006), more popularly known as the Blue Book, the United Nations (UN) had raised the basic question 5 : “why are so many bankable people unbanked?”

According to the United Nations¹ the main goals of Inclusive Finance are as follows:

- Access at a reasonable cost of all households and enterprises to the range of financial services for which they are “bankable,” including savings, short and long-term credit,
- Leasing and factoring, mortgages, insurance, pensions, payments, local money transfers and international remittances.
- Sound institutions, guided by appropriate internal management systems, industry performance standards, and performance monitoring by the market, as well as by sound prudential regulation where required

Financial and institutional sustainability as a means of providing access to financial services over time. Multiple providers of financial services, wherever feasible, so as to bring cost-effective and a wide variety of alternatives to customers. Multiple providers of financial services, wherever feasible, so as to bring cost-effective and a wide variety of alternatives to customers.

3. Pioneer of Inclusive Growth

The United Kingdom was one of the first countries to realize the importance of financial inclusion. It published its strategy of financial inclusion in its report Promoting Financial Inclusion which was published alongside the Pre-Budget Report of 2004. The UK government also set up the Financial Inclusion Fund of £120 m to help bring about Financial Inclusion. The Financial Inclusion Taskforce was formally launched on 21 February 2005 to monitor progress on financial inclusion and to make suitable recommendations.

4. Experience of Bangladesh

Muhammad Yunus, a Bangladeshi micro economist and Nobel laureate, has realized the huge business potential of the poor and women and proved that the conventional theory that downtrodden people cannot be bankable is obviously wrong. His Grameen Bank is successfully lending not only to the downtrodden but also to beggars in more than 20 countries. He is the champion of poor and women empowerment. By witnessing this successful financial inclusion story, many countries are grafting strategies to bring these people into the formal banking net. Grameen Bank has played a major role in improving the status of the poor in Bangladesh and has provided access to credit. According to Mr. Khalid Shams, Managing Director, Grameen Telecom, “Grameen Bank’s founder and winner of Nobel Peace Prize, Dr Muhammad Yunus, has played a great role in the transformation of the rural sector in Bangladesh and establishing credit as a “human right” of the poor.” Every year nearly 5% of the Grameen Bank clients are getting out of poverty.

5. Lesson from Ghana

Lessons from successful experiences provide insightful lessons about the benefits that accrue when women and youth cooperative entrepreneurial efforts are targeted and supported. Multi stake Savings and Credit Society in Ghana for instance has worked to enable youth and women to successfully engage in entrepreneurial activities. The organization has developed innovative credit facilities for both teenage mothers, women and youth and has continually provided training and technical support to its clients through its mentoring programme². Others organizations like Kenya Youth Business Trust (KYBT) are working with youth to ensure that they succeed in business ventures and are also linking up with educational institutions to offer such education.

The experience of another successful programme Camfed is also insightful. Camfed, a NGO operating in Zambia, Zimbabwe, Tanzania and Ghana, incorporates mentoring into its financial services initiatives for youth. Through its Seed Money program, Camfed promotes the empowerment and development of young women via mentoring, grants and loans. Young women develop business plans and are provided with grants and then loans within a structure of extensive community involvement, including the help of the local Camfed Association (CAMA). Experienced businesswomen from the local communities provide technical expertise, advice and encouragement on the business aspects of the program to participants in the program. Mentoring is integral to this program. As a result of the program, a number of youths have built houses, engaged in farming and animal husbandry, or are running small shops while some are able to support themselves and their families. Additionally, 20 percent of the youths have opted to further their own education with the profits made from their businesses³.

6 .Indian Experience

For a country like India Where one third of the population is poor, access of the poor to banking services is

important, not only for poverty alleviation but also for optimizing their contribution to the growth of the national economy. This realization had led to certain important banking related policy initiatives in the last three decades. These were nationalization of major commercial banks and setting up of regional rural banks, launching of large credit supported programs aimed at creating self-employment opportunities for the poor, and persuading banks to participate in such programs. Although these measures have greatly increased the outreach of the banks among the hitherto poorer section of the society, it was increasingly felt that even these initiatives, perhaps, succeeded in reaching only the upper crust of the poor and by passed the lowest rungs of the society. Financial exclusion has been all pervasive in India. Over 41 percent of India's working population earn but have no savings. Even after accounting for those with cash savings, too large a proportion of the poor lie outside the formal banking system. For example, only 34.3 percent of the lowest income quartile has cash savings, and only 17.7 percent have a bank account.

By contrast, in the highest income quartile, 92.4 percent have cash savings and 86.0 percent have bank accounts. Similarly, 29.8 percent of the lowest income quartile had taken a loan, but only 2.9 percent had loans from banks (about one tenth of all loans), while 16.3 percent of the highest income quartile had loans and 7.5 percent had loans from banks or about half of all loans⁴. A well-functioning financial system is a crucial part of development, promoting economic growth and reducing poverty. As per the Indian Census of 2001, 74% of Indians live in 6,38,365 different villages. India has about 500,000 villages that are scattered throughout the country, where the population varies accordingly. Some villages have a population less than 500, while 3,976 villages have a population of more than 10,000 people. The Reserve Bank of India has set up a commission⁵ (Khan Commission) in 2004 to look into financial inclusion and the recommendations of the commission were incorporated into the mid-term review of the policy (2005–06). In the report RBI exhorted the banks with a view of achieving greater financial inclusion to make available a basic "no-frills" banking account.

The 'inclusive growth' as a strategy of economic development received attention owing to a rising concern that the benefits of economic growth have not been equitably shared. The strategy for inclusive growth as envisioned in the Eleventh Plan is not just a conventional strategy for growth to which some elements aimed at inclusion have been added. On the contrary, it is a strategy which aims at achieving a particular type of growth process which will meet the objectives of inclusiveness and sustainability. It is an acknowledged fact that the economic growth has failed to be sufficiently inclusive particularly after the mid-1990s, the period during which the economy grew at a relatively faster rate. The Indian economy, though achieved a high growth momentum during 2003-04 to 2007-08, could not bring down unemployment and poverty to tolerable levels. In fact there are reports that the incidence of poverty has gone up, notwithstanding official figures. Major indicators of human development though showing improvement, their growth rates have been sluggish and lag behind several Asian countries. In recent decades, economic and social inequalities have increased alongside high growth rates which have exacerbated regional inequalities.

Given the importance of inclusive growth and the policies towards this direction, financial inclusion assumes greater importance as access to finance by the poor and vulnerable groups is a prerequisite for poverty reduction, social cohesion and inclusive growth. Growth is inclusive when it creates equal economic opportunities as also access to the same for everyone in the society. Inclusive growth as the literal meaning of the two words refers to both the pace and the pattern of the economic growth. The inclusive growth approach takes a longer term perspective as the focus is on productive employment rather than on direct income redistribution, as a means of increasing incomes for excluded groups.

7. The Model for Inclusive Growth

Deepening the financial system and widening its reach is crucial for both accelerating growth and for equitable distribution, given the present state of development, of our country. We have to continue with our efforts to combat illiteracy, poverty, ignorance, cultural and psychological hurdles and simultaneously design innovative, lucrative and low cost banking products and services to lure public.

a) Stage I: Create Awareness & Financial Literacy

Government should promote introduction of basic banking- relevance, services, merits as a topic in educational institutions. Government sponsored publicity campaigns through media- radio; television; newspapers; e-choupal; village panchayat; movies; local stage shows etc. Banks should design and organize aggressive education cum promotion campaigns in unbanked parts of urban, semi-urban and rural areas to enhance financial literacy and awareness. Banks should gather support from the NGOs, academic institutions, to reach the desired umbers within a limited span of time.

b) Stage II: Basic Banking

All banks should allow on frill accounts i.e. savings accounts which can be opened with a nominal amount of Rs.5/- or even with zero balance. They should allow 6-7 withdrawals in the accounting period and should not restrict the number of deposits. Reduce the complexity and speed up the processing at banks. Banks should make sure that local people are positioned in the front offices to facilitate general public. Despite the risk, financing of first time entrepreneurs is a must for financial inclusion and growth. Banks should arrange and provide technical advice for these entrepreneurs.

c) Stage III: Innovative Strategies

Infrastructure sharing amongst banks and other organizations will help in lowering the operating cost and thus the cost benefit can be transferred to customers. Bank should open small extension counters at organization providing public utility services such as local school, primary health care centres, village mandies farmers associations, cold storages and warehouses, railway stations, bus stops etc. This should simultaneously be supplemented by mobile banks. Wherever it is not economical to set up a branch, credit camps/ loan 'melas' must be organized on weekly basic, to disburse small loans on easy terms. Government should initiate a 'civil rights law' prohibiting discrimination by banks against low and moderate income neighborhoods. This will create a pressure on banks to play an important role in bringing financial inclusion in the country.

8. CONCLUSION

While a number of measures have and are being taken across the country, given the enormity of the task, a lot of ground still needs to be covered. Apart from the Government and the regulatory bodies, there is a need for involving the civil society and all other stakeholders in spreading financial literacy. We need to evolve distinct strategies targeting the school children and the adult population. After all, while one-time, targeted programmes are useful, including financial education into school curriculum in an on-going manner would hold the key to making our future generations financially literate⁶. The widespread existence of financial illiteracy indicates that we need to do a lot more.

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A STUDY ON THE ROLE OF FINANCE ON VARIOUS BUSINESS MODELS

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ABSTRACT

Aim of this Research is to emphasize on the shift occurred in the payment mechanism and its long term benefits in India. Changes that have occurred in Small Scale Businesses & Large-Scale Businesses. We have Surveyed Distributors, Street Vendors & Through our Detailed Questionnaire built this research proposal. Its Impact in Banking Services across India, Changes Induced by Artificial Intelligence, Automation are below stated in the research below. Lessons Learnt from the Covid-19 Pandemic from a Financial Stability Perspective.

Keywords: Finance, Fintech, Artificial Intelligence, Automation, Banking, Covid-19.

OBJECTIVES

Sustainability of Online Payment.

Checking the Awareness & Perceptions of the Market towards the New Normal. Impact on Businesses Post Lockdown.

Highlighting the Changes Induced by Automation.

INTRODUCTION

The Covid-19 Pandemic is the first major test of global financial system since the G20 reforms were put in place following the financial crisis of 2008. While significantly different in nature from the 2008 crisis, the real-life test may hold important lessons for financial policy, including the functioning of the G20 reforms. Any analysis at this stage need to bear in mind that the pandemic is not yet over and that its economic and financial impact has been greatly mitigated by bold policy actions.

Shift to digital payments in India is permanent, will retain in post pandemic worlds: Experts said that the entry of small businesses into digital payments is significant and irreversible. The novel coronavirus, or COVID19, Pandemic has brought a permanent shift in the way Indians make payments. This shift from cash and cards to digital contactless payments is likely to stay in the post-pandemic world, experts said. The future of Digital banking and Payments in a Post-pandemic World, industry experts said the entry of small businesses into digital payments is significant and irreversible.

Praveena Rai, COO, National Payments Corporation of India (NPCI), said that taking orders through WhatsApp, SMS or calls and then delivering at the doorstep while accepting payments remotely is a critical trend.

“At this point... growth is far more prominent on e-commerce - even more than that prior to the pandemic and during the first phase of the lockdown. The conversion of cash on delivery (COD) to demand draft on delivery (DOD) is interesting. COD was an animal we were trying to tame, and it seems that its day has finally come,” Rai said.

Ravindra Pandey, Chief Digital Officer State Bank of India, said, “Consumer behaviour towards digital is here to stay even after the pandemic, there is no doubt”.

Weathering COVID-19: Impact on Banking in India

The impact on the key stakeholders, and the way forward for the financial institutions. COVID-19 has emerged as the black swan event of the century, with significant macroeconomic impact both globally and in India.

The exponential spread of COVID-19 has led to a significantly fall in major indices, indicating its impact and potential to significantly affect GDP growth. While the Overall impact of COVID-19 on credit growth is expected to be negative across most sectors, the degree and nature of the impact is likely to vary based on the duration and extent of disruption.

SURVEY

In our survey we visited medium and small-scale enterprises their behavior and outlook towards the digital payments and overall impact that they faced during as well as post covid-19. In, our survey we had conversation with street vendors, retail distributors, luxury good sellers and reviewing various banks as well as financial institutions.

The questionnaire that we used is as follows:

1. Difference between the Business Pre and Post Lockdown?

- We Questioned them regarding the sales volume the majority they said that the sales volume has reduced due to entry of new competitors in the market. Maximum of them where introduced to online mode of payments during the lockdown and they heavily shifted towards the online portals such as Zomato, Swiggy, Uber Eats, etc. in order to get advantage of the change in consumer behaviour.

2. Shift in Payment Modes? Pre & Post Lockdown?

- They Experienced Heavy Shift in Online Mode of Payment the first shift was visible after 2016 (Demonetization). But after the lockdown as the major businesses as well as customer preference was visible towards the online modes to payment.

3. Fluctuation in Raw Material Prices?

- Majority of the vendors experienced High Prices in the Raw material Commodity in the food business & Low Margins in the Distribution Business was also evident.

4. Hurdles in Conceiving Online Payments?

- Surprisingly, the Responses where positive in Matter of Online Payments.
- Some of the Shop owners still Prefer the cash Payment due to fear of adaptation.

5. Their Experiences of Fraudulent?

- Online Frauds where not experienced by any on the shop owners that We reviewed.

Impact on Banking

A short-term disruption is likely to lead to accessibility concerns and scaling down of SME/Corporate Customers.

A more prolonged crisis is likely to increase customer preference towards digital channels and products such as insurance, in addition to defaults by SMEs/Corporate. A full-blown pandemic is likely to lead to a significant reduction in demand from SMEs/Corporate, Structural Shifts in Customer Behaviour, and transformation of employee roles and overall operating model.

While the government and RBI have already swung into action with targeted interventions, prolonged disruption could result in further initiatives facilitating structural changes in the industry.

Way Forward

Financial Institution are beginning to respond to some of the immediate imperatives to facilitate business continuity. However, a focused approach that involves a combination of tactical initiatives to address immediate concerns, strategic interventions to recalibrate business models and drive growth would be critical for driving profitable growth in the long run.

In this two-part series we explore potential interventions for banks and NBFCs to respond, recover and thrive. This report focuses on near-term initiatives needed to effectively respond to the crises. Stay tuned for the next part where we focus on the strategic interventions required across potential scenarios.

Role of Artificial Intelligence & Automation

Automation and Artificial Intelligence (AI) played a very important role in defining this “new normal” of work in the Covid-19 (and post-Covid-19) world. The ongoing COVID-19 pandemic seems to generally have dispelled a few hardened organisational “myths” (for example, large scale work-from-home is not possible) and forced companies to relook at how they work and interact with key stakeholders. Companies, and subsequently employees have been compelled to innovate-on-the-go (for example, quickly shipping large screen monitors and printing to the home of employees before lockdown closed the markets). Perhaps, it would not be an exaggeration to say that even the best drafted Business Continuity Plans (BCPs) for most companies were stretched to the limit and yet struggled to cope with the rapid and unpredictable evolution of the pandemic. From the evidence available thus far, it seems apparent that the world will have to learn to adapt swiftly and significantly to a “new normal” of work to deal with the current (and potential future) phases of Covid-19. More specifically, automation and AI can help companies infuse three key attributes of Agility/Flexibility, Responsiveness and Frugality, enabling companies to better adapt to the fast-changing situations in the times of Covid-19.

Agility/flexibility: Most organisations in the pre-Covid-19 world were “human intensive,” wherein most work (especially in the non-manufacturing sectors) was performed by humans. A fundamental challenge with “human intensive” organisations is swift scalability based on the demands that the dynamic environment Covid-19

presents. For instance, when most governments announced policies related to mortgage payment deferment to help citizens better cope with Covid-19 related economic challenges, several banks and financial institutions had to scramble for additional human resources to process the sudden spike in these additional (and probably one-time and time-sensitive) transactions. This is where Automation & AI can help organisations significantly. Both Robotic Process Automation (RPA) and AI bots are typically hosted on servers and hence, do not need to change work locations as humans were required to. They can also be replicated (scaled up or down) almost on demand. The evidence in the marketplace suggests that those banks who had employed automation to deal with these demand fluctuations in work generally fared much better than those who relied primarily on humans working remotely to handle the additional workload.

Responsiveness: Covid-19-induced lockdowns threw many well-defined and widely-followed processes off gear across companies. For instance, in several companies, IT and HR support were typically located in defined physical spaces or in call centres. However, as most employees began to work remotely, it became difficult for them to get answers on important IT and HR-related questions. Automation and AI can help manage these interactions efficiently and also enhance the stakeholder experience. For example, certain companies leveraged technologies such as chatbots to answer employee queries quickly, effectively, and remotely. This helped reduce employee anxiety and improve productivity. The same interaction technology can be leveraged to enhance interaction experience with other important stakeholders such as customers and vendors. Another example is that of a global automobile player, which recently launched its online sales, 360-degree digital services, and a contactless-service experience in the first week of April. They leveraged robotics, AI, and ML technologies to bring continuity to their operations and minimise disruptions for their customers.

Frugality: Covid-19 has significantly impacted the top line of most companies. Hence, it is crucial that companies focus on their bottom line to actively manage profitability. Automation and AI can help companies effectively manage and optimise costs. For example, technologies such as RPA, Natural Language Processing (NLP), and Natural Language Generation (NLG) can automate 25– 50 per cent of processes. This will help companies achieve better outcomes at lower costs and also free up human time for higher value work (e.g., better serving high-value customers, responding faster to regulatory requirements or government directives).

Cyborg chess has demonstrated that when human and machine capabilities come together, they produce better results than both “human only” and “machine only” capabilities. As companies across the world adapt to new ways of working, automation and AI can create a HumBot (human + robot) workforce to effectively combine the human capability of superior thinking with the fast- execution capability of robots. Companies that successfully combine human and machine capabilities will not only survive the challenging conditions but will likely come out with newer, better, and stronger capabilities. These enhanced capabilities will enable organisations to “rewrite the rules of the game” in their industries and occupy a place of sustainable prominence in the revamped competitive landscape of the current and post-Covid-19 world.

CONCLUSION

Lessons Learnt from the Covid- 19 Pandemic from a Financial Stability Perspective.

The COVID-19 event may yet test the resilience of the global financial system. Economic forecasts have been revised upwards, and buoyant asset valuations could be tested by a further rise in government bond yields. At the same time, uncertainty remains high against the backdrop of uneven vaccination progress and the continuation of containment measures. Asynchronous economic cycles could lead to widening interest rate differentials between economies, potentially inducing disorderly capital outflows from EMEs as dollar denominated investments are suddenly reallocated across jurisdictions. Identifying systemic vulnerabilities early on remains a priority. The current low level of corporate insolvencies may be predicated on continued policy support. Banks and nonbank lenders could still face additional losses as these measures are unwound, revealing the extent of the economic scarring across sectors and jurisdictions. The results of recent bank stress tests suggest that the largest banks are well capitalised and will remain resilient under a range of recovery scenarios. Yet there may be questions about banks’ willingness to sustain real economy financing in an environment of deteriorating non-financial sector credit quality. Preserving financial stability is a necessary precondition for ensuring the smooth flow of finance to the real economy. A gradual and targeted future unwinding of COVID-19 support measures should support financial stability during the recovery. 25 Authorities may follow a flexible, state- contingent approach, adjusting and withdrawing gradually, by ensuring that measures are targeted; requiring beneficiaries to opt in; making the terms on which support is provided progressively less generous; and sequencing the withdrawal of support measures. Clear, consistent and timely communication about policy intentions can help the economy adjust to changes in policy. One of the legacies of the pandemic may be a build-up of leverage and debt overhang in the non-financial sector. High corporate and,

in some cases, sovereign indebtedness was already a concern before the outbreak of COVID-19. Rapid and large credit support has increased debt levels, especially in the hardest-hit sectors. This is warranted in the context of an exogenous shock such as the one produced by the pandemic, but it may also keep unviable firms solvent with knock-on effects on the economy and financial system. Addressing debt overhang, including by facilitating the market exit of unviable companies and an efficient reallocation of resources to viable firms, may be a key task for policymakers going forward. The COVID-19 experience reinforces the importance of completing remaining elements of the post-crisis reform agenda. Overall, those parts of the global financial system where implementation of post-crisis reforms is most advanced displayed greater resilience. The financial stability benefits of the full, timely and consistent implementation of G20 reforms, including with respect to Basel III, OTC derivatives, resolution frameworks, and NBSF, remain as relevant as when they were initially agreed. At the same time, it will be important to evaluate the functioning of the reforms during the COVID-19 event in more depth and evaluate whether these reforms, once implemented, are effectively working as intended. This includes analysing and understanding how macroprudential policy has functioned in practice. Evidence gathered thus far already suggests some specific aspects of how the post-crisis regulatory framework functioned should be further examined. This includes the role and usability of capital and liquidity buffers; the performance of countercyclical elements in prudential regulation; and potential remaining sources of excessive procyclicality whose impact may have been dampened or delayed as a result of the official sector support. Vulnerabilities in parts of the NBSF sector need to be addressed with priority, keeping momentum and ambition in the work underway. The underlying structures and mechanisms that exposed the financial system to considerable strains in March 2020 are currently still in place. It is important to advance the comprehensive work programme the FSB has developed, in collaboration with SSBs, to enhance the resilience of the NBSF sector while preserving its benefits. This includes policy work to enhance MMF resilience and analysis of vulnerabilities in open-ended funds, the role of margins, and the drivers of bond market liquidity. International coordination of NBSF policy responses can help to avoid regulatory arbitrage and market fragmentation given the cross-border activities of many entities in this sector. Steps to ensure that the regulatory framework delivers the intended level of resilience also includes work to assess the adequacy of financial resources of CCPs in light of their systemic importance. COVID-19 has reinforced the need to promote resilience amidst rapid technological change in the economy and global financial system. The rapid use and adaptation of new technology have helped firms to operate effectively in the new environment. At the same time, they have put the spotlight on the need to ensure operational resilience in an environment of greater reliance on outsourcing and third-party service providers, including on a cross-border basis. More generally, the boost that COVID-19 seems to have given to digital financial services, in particular various forms of digital payments, reinforces the need to ensure that regulatory frameworks and approaches provide a solid basis for harnessing the benefits of such innovation while containing their risks. Next steps on these issues will be set out in the final report in October. This interim report will be used to engage with external stakeholders on preliminary findings and issues raised from the analysis to date. The final report to the G20 Summit in October will reflect any further FSB/SSB work by then and takeaways from stakeholder engagement, and set out tentative lessons and next steps to address the identified issues.

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RUDYARD KIPLING AND THE ROOTS OF SCIENCE FICTION

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ABSTRACT

A leading American science fiction writer, said about his predecessor Rudyard Kipling: "He is for everyone who responds to vividness, word magic, and sheer storytelling. Most readers go on to discover the subtleties and profundities." His colleague Gordon R. Dickson called him "a master of our art." Kipling, the man they were praising was born in the 19th century and died in the 20th. Kipling also wrote of new inventions and future wars and warned of the social consequences of technological change. He exerted an immense influence on modern science fiction. Like Verne and Wells, Kipling wrote stories whose subject-matter is explicitly science-fictional. The paper examines the lasting influence of Rudyard Kipling on Modern Science fiction.

Keywords: Magic, vividness, Social Consciousness, technology, science fiction

Science fiction is a genre of fiction set in a society that differs from the present because of some innovation in science or technology. It is distinct from fantasy in that, within the context of the story, its imaginary elements are largely possible within scientifically established or scientifically postulated laws of nature (though some elements in a story might still be pure imaginative speculation). Exploring the consequences of such differences is the traditional purpose of science fiction, making it a "literature of ideas". Science fiction is largely based on writing rationally about alternative possibilities. The settings for science fiction are often contrary to known reality, but the majority of science fiction relies on a considerable degree of suspension of disbelief provided by potential scientific explanations to various fictional elements. These may include:

- A setting in the future, in alternative timelines, or in an historical past that contradicts known facts of history or the archaeological record
- A setting in outer space, on other worlds, or involving aliens
- Stories that involve technology or scientific principles that contradict known laws of nature.
- Stories that involve discovery or application of new scientific principles, such as time travel or psionics, or new technology, such as nanotechnology, faster-than-light travel or robots, or of new and different political or social systems (e.g., a dystopia, or a situation where organized society has collapsed)

When we are trying to seek the roots of science fiction, the names of Jules Verne (1828-1905) or of H.G. Wells (1866-1946) come to our mind. When Hugo Gernsback founded the first real Science Fiction magazine in 1926, he filled out the early issues of *Amazing Stories* with reprints of their stories. The writers who shaped modern science fiction, Robert Heinlein, Isaac Asimov, A.E. Van Vogt, L. Sprague de Camp, read Verne and Wells as boys. But today their works have achieved the status of classics: much honored but little read. It was their contemporary Rudyard Kipling (1865-1936) who has exerted the most lasting influence on modern science fiction. And it was Rudyard Kipling of whom Poul Anderson says, "His influence pervades modern science fiction and fantasy writing".

Like Verne and Wells, Kipling wrote stories whose subject-matter is explicitly science-fictional. "With the Night Mail: A Story of 2000 A.D." portrays futuristic aviation in a journalistic present-tense that recalls Kipling's years as a teenaged subeditor on Anglo-Indian newspapers. "The Eye of Allah" deals with the introduction of advanced technology into a mediaeval society that may not be ready for it.

But it is not this explicit use of science and technology in some of his stories that makes Kipling so important to modern science fiction. Many of Kipling's contemporaries and predecessors wrote scientific fiction. Nathaniel Hawthorne and Herman Melville, Mark Twain and Conan Doyle are among them. Yet echoes of their work are seldom seen in today's science fiction. Kipling's appeal to modern readers lies instead in his approach and his technique

The real subject-matter of Rudyard Kipling's writing is the world's work and the men creative or administrative; the performance of his work is the most important thing in a person's life. As Disko Troop says in *Captains Courageous*, "the most interesting thing in the world is to find out how the next man gets his vittles"

This is not a view shared by most of 20th-century literature; nor is Kipling's special sympathy with the work of Empire. This may explain why Rudyard Kipling has received less attention from the literary establishment than

his writings deserve. But he was an enormously popular writer, especially among working people. Even to this day he is widely quoted, often by people who would be shocked to learn the source of the colorful expressions they so often use. Today's science fiction writers find their audience among the same strata of society that in Victoria's time read Kipling: adults engaged in the shaping of our world and young people exploring what life has to offer.

Kipling's writing embodies an attitude toward that work that places its satisfactory completion above convenience, desire, and comfort in the scheme of things. This attitude toward work and duty is also characteristic of modern science fiction. It places men and women in the role of creators and maintainers, rather than victims. It prefers exploring the intricacies of the craftsman's vision to indulging the subtleties of the narrative voice.

This exaltation of work and duty may be unfashionable in literary circles today, but no technological society can flourish without it. Science fiction may not be essential to the survival of Western civilisation; but some literary tradition that embodies its essential attitudes will always accompany humankind on its road to the stars. The influence of Rudyard Kipling will be writ large upon that literature, whatever form it may take, for many years to come

Kipling faced the same technical problem that the modern science fiction writer faces: the need to make an alien time and place understandable to his audience. Whether the scene be India under the British Raj or Mars under the Solar Federation, the reader needs to know the essential differences in biology, technology, and sociology that govern the characters and their actions. This information needs to be provided without interfering with the narrative. The reader wants a story, not a lesson

John W Campbell, the magisterial editor who shaped the Golden Age of science fiction, considered Rudyard Kipling the first modern science fiction writer. Kipling, he explained, was the first to go beyond simply providing the reader with the essential background information needed to read his story. He was thinking here of "With the Night Mail". When this pseudo-journalistic account of transatlantic dirigible traffic first appeared in 1905, the text was accompanied by weather advisories, classified advertisements, shipping notices, and a wide range of other snippets intended to suggest that the tale was in fact appearing in a magazine published in 2000. All this stage business was extraneous to the story but it did help to establish the setting

Kipling had learned this trick in India. His original Anglo-Indian readership knew the customs and institutions and landscapes of British India at first hand. But when he began writing for a wider British and American audience, he had to provide his new readers with enough information for them to understand what was going on. In his earliest stories and verse he made liberal use of footnotes, but he evolved more subtle methods as his talent matured. A combination of outright exposition, sparingly used, and contextual clues, generously sprinkled through the narrative, offered the needed background. In *Kim* and other stories of India he uses King James English to indicate that characters are speaking in Hindustani; this is never explained, but it gets the message across subliminally.

Modern science fiction writers and their readers have become so accustomed to this sort of thing and so dependent on it that it has made much of the genre literally unreadable to many who have not learned its reading protocols. Samuel R Delany has observed that a statement that is meaningless in mimetic fiction (such as "The red sun is high, the blue low") can be a matter of simple description in science fiction, and a statement that could only be metaphorical ("Her world exploded") might be meant as literal fact in SF. It is this divergence in the way words are used, rather than any exoticism of subject-matter or the use of experimental narrative strategies (here SF is usually very conservative), that separates modern science fiction from the literary mainstream. And all this began with Kipling. It is certainly a matter of fact that Kipling's works are immensely popular among SF writers. Allusions to Kipling in story titles and quotations from his verse may be found throughout the genre. Autobiographical essays and story introductions widely acknowledge Kipling as a favorite writer and a major inspiration. David Drake and Sandra Miesel have assembled two anthologies of stories written under the influence of Kipling, accompanied by introductions in which the likes of Poul Anderson, L Sprague de Camp, Joe Haldeman, and Gene Wolfe describe the impact that reading Kipling has had on their own writing. (*Heads to the Storm*, and *A Separate Star: A Science Fiction Tribute to Rudyard Kipling* were both published by Baen Books in 1989.)

But the best way to understand why Kipling has exerted so great an influence over modern science fiction is to read his own work. Begin with *Kim*, the most successful evocation of an alien world ever produced in English. Follow the Grand Trunk Road toward the Northwest Frontier and watch the parade of cultures that young Kimball O'Hara encounters. Place yourself in his position that of a half-assimilated stranger in a strange land;

and observe carefully the uneven effects of an ancient society's encounter with a technologically advanced culture. SF writers have found Kim so appealing that several have told their own versions of the story: Robert Heinlein's *Citizen of the Galaxy* and Poul Anderson's *The Game of Empire* are two of the best.

Then we look at *Puck of Pook's Hill* and *Rewards and Fairies*, two collections of linked stories in which Kipling brings incidents of English history and prehistory to life, both for the children for whom the books were written and for their elders. One could classify them as time-travel stories, thus bringing them into the taxonomy of science fiction. But their real relevance lies in the careful evocation of time and place, echoed in so many later stories by other writers who bring a modern observer into direct contact with earlier days. And by all means read Kipling's own science fiction stories. Most of these were collected in *Kipling's Science Fiction* (New York: Tor Books, 1992), edited by the late John Brunner, a noted British Science fiction writer.

Here are some of Kipling's science fiction stories (in chronological order of initial publication) with particular attention to those aspects that place them in the science fiction category

"A Matter of Fact" (from *Many Inventions*, 1893) is a tall tale in which three journalists sailing from Cape Town to Southampton aboard a tramp steamer encounter a dying sea-monster and its mate. Though the monster is vividly described, the story's emphasis is not so much the creature itself as the journalists' varying responses to it and to the story that it represents. The American Keller is eager to telegraph a scoop to his paper, while the German Zuyler and the (unnamed) English narrator are hesitant to report the story. Once the three come ashore, Keller is abashed by the stolid antiquity of the England he sees from the train window and comes to understand that he has not really got a story to tell. The sensationalist American papers, in which "everything goes", regard it as just one more example of playing the reading public "for suckers"; and the English paper he approaches takes it as an unwelcome practical joke. The narrator tells Keller that his plan is to recount the story as fiction:

"...for Truth is a naked lady, and if by accident she is drawn up from the bottom of the sea, it behooves a gentleman either to give her a print petticoat or to turn his face to the wall and vow that he did not see".

A journalist himself, Kipling is naturally sensitive to the way in which the public receives and understands the news. As in the later "The Eye of Allah" he explores in this story the implications of bringing a scientific discovery to a public unprepared to deal with it.

"The Ship That Found Herself" (from *The Day's Work*, 1898), one of several stories in which Kipling employs the pathetic fallacy, is the story of the *Dimbula's* first voyage from Liverpool to New York. The primary characters are personifications of the freighter's component elements or of the environmental forces that act upon her. The ship's officers appear at the beginning and end of the story, but only as commentators, not as actors. The essence of the story is the melting of all *Dimbula's* separate pieces "into one voice, which is the soul of the ship" — which happens when all realise that they have their part to play, and that playing that part is the most important thing that there is.

"007" (from *The Day's Work*, 1898) is another venture into the personification of inanimate objects. This time the characters are steam locomotives, entire great machines rather than mere components, and most of them are experienced veterans of Massachusetts railroading. The exception is '007', whose "red paint was hardly dry on his spotless bumper-bar". He suffers the disdain of his roundhouse-mates, enjoys the sympathy of "a small, newish switching-engine" called Poney, and by rescuing one of his tormentors from derailment finally earns the respect of his seniors and the status of "full and accepted Brother of the Amalgamated Brotherhood of Locomotives". Though in outline it resembles a classic school story, the essence of "007" is Kipling's fascination for the work of the world, and his respect for the men and women (and machines) who perform it.

"The Army of a Dream" (from *Traffics and Discoveries*, 1904) is less a story than a tract: an argument for universal military training, starting in childhood. The Narrator encounters his old comrade-in-arms Boy Bayley, now commanding "the Imperial Guard Battalion of the old regiment". Bayley and his mess-mates spend the afternoon explaining the structure of Britain's military system, in which "all boys begin physical drill to music in the Board Schools when they're six" and continue soldiering for decades. It is an all-volunteer army — "But as a little detail we never mention, if we don't volunteer in some corps or other — as combatants if we're fit, as non-combatants if we ain't — till we're thirty-five — we don't vote, and we don't get poor-relief, and the women don't love us." This is familiar to readers of Robert Heinlein's 1959 novel *Starship Troopers*, set in a society which restricted citizenship to veterans of military service.) The Narrator sees a competition for admission to the Guard Battalion, and at the end of the day is taken to a park "dotted with boys in and out of uniform, armed and unarmed" to watch their manoeuvres. At the end we learn that all this was indeed a dream.

In 'Wireless' (from *Traffics and Discoveries*, 1904) Kipling captures the excitement of the infant science of radio, and the single-mindedness of the young experimenter. The first-person narrator is visiting a chemist's shop where the proprietor's nephew is an avid investigator of "this Marconi business" and plans to demonstrate this new form of communication. "There's nothing we shan't be able to do in ten years", he exclaims. "I want to live—my God, how I want to live, and see it develop!" But the narrator spends most of the evening with the chemist's tubercular assistant, who inexplicably begins to recite verses channeled from some source unknown to himself — but quite familiar to our narrator. In parallel with the transmission of Morse across the ether, we share the unconscious communication of a dying lover with the poet who a century before had shared both his emotion and his consumption.

"With the Night Mail: A Story of 2000 A.D." (from *Actions and Reactions*, 1909) and its sequel "As Easy as A.B.C." (from *A Diversity of Creatures*, 1917) explore the social as well as the technical side of a world economy based on air traffic. Technological change touches human lives, individually as well as collectively, and in these stories we see that ordinary people as well as heroes will be affected by aerial technology and the social structures set up to govern it. "With the Night Mail" is a journalist's account of a dirigible voyage aboard 'Postal Packet 162', carrying the mails from London to Quebec. The voyage itself is the story: no dramatic incident occurs, but that is precisely the point. Transatlantic aerial voyaging is a routine fact of life at the end of the 20th century. Kipling takes great pains to tell the tale as though he were reporting it in 2000 to readers familiar with the technology and sociology of travel: after the title appears in parentheses "Together with extracts from the contemporary magazine in which it appeared". In "As Easy as A.B.C.", set sixty-five years later, Kipling investigates the nature of a society that might exist in a world of aerial traffic and the 'Aerial Board of Control' that exists to regulate it. But despite their remit to provide for "the planetary traffic...and all that that implies", the Board members' primary concern is the investigation of the cardinal sins of 21st-century civilisation: "crowd-making and invasion of privacy". Against these evils they deploy an armoury of high-technology weapons — and the ingenuity of a music-hall promoter with an eye for a profitable freak-show. Paul Anderson described "As Easy As A.B.C." as "a wonderful science fiction yarn, showing the same eye for detail that would later distinguish the work of Robert Heinlein"

"In the Same Boat" (from *A Diversity of Creatures*, 1917) explores the frontiers of psychology. Two physicians discover that each has a patient suffering from paralyzing attacks of depression. Drugs are no use: they may "veil the horror" but cannot prevent its return. Being English physicians, neither even considers the talking cure. Instead the two patients — a young man and a young woman — are sent off together on a series of overnight railway journeys, during which they help one another to discover the prenatal traumas at the root of their afflictions and lend each other the strength to overcome them. (Although Freudian ideas seem to underly this story — *The Interpretation of Dreams* was published in 1900 — neither his name nor the word "psychoanalysis" is mentioned.)

"Unprofessional" (from *Limits and Renewals*, 1932) tells of four scientifically inclined friends whose leisure time and financial resources enable them to undertake research meant to understand "on what system this dam' dynamo of our universe is wound". Their investigation of the "tides" in living cells discover differences between the behavior of normal and malignant tissue, variations that apparently determined by some external influence. Whether Kipling was anticipating subsequent discoveries about circadian rhythms (as John Brunner suggests) or hinting at a scientific basis for astrology (as J.M.S. Tompkins suggests) is unclear; like "Mrs Bathurst", this story may have been overenthusiastically subjected to Kipling's blue pencil.

Science fiction writers know Rudyard Kipling as a tremendously versatile writer, a superb literary craftsman, and an inspiration to those who have chosen to write of people and the work that they do. *Heads to the Storm* and *A Separate Star* make this inspiration explicit, but any substantial collection of science fiction and fantasy will inevitably include many stories written under his influence. As any science fiction writer will cheerfully admit, Rudyard Kipling is indeed "a master of our art"

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**STRATEGIES FOR CARBON EMISSION MINIMIZATION TARGET IN SUNDARBAN DELTA
REGION OF WEST BENGAL, INDIA**

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Climate change is an inevitable part of world's existence. Due to human's indiscriminate activities, a rapid change in climate has been observed. One of its devastating impact is rapid rise in temperature due to greenhouse effect. The temperature rise leads to polar ice melting and rise in global sea level. The water has come from Himalayan glacial melt and added with the Bay of Bengal and the sea level rise at a dangerous height. Sundarban region, the home of Royal Bengal Tiger which contains world's largest remaining area of mangroves, and is well known for its exceptional biodiversity is facing a threat of existence due to this sea-level rise. Moreover, the dwellers of this area are constantly fighting for their existence due to high intense and frequent natural calamities forcing to insecure their lives & livelihoods.

Sundarbans delta is situated at the Ganga- Brahmaputra deltaic region of India and Bangladesh and is one of the largest mangrove coastal delta, which falls under unique complex diverse- risk prone (CDR) agro-ecosystem (Yadav *et al.*, 2009). About 68% of the total cultivable lands in Sundarbans are low lying, mostly monocropped with long duration traditional variety of paddy in rainy (*kharif*) season and remain fallow during the rest of the period of year. The crop yield in the area is usually very poor (2.0 - 2.5 Mg ha⁻¹) due to biophysical constraints (Bandyopadhyay *et al.*, 2010). The cropping intensity and production levels are much lower compared to national average. Salt accumulation and dense subsoil layers negatively affect the crop growth and it's the principal reason for the degradation of farmlands (Ganjugunte *et al.* 2014). Increasing soil acidity, water logging (in *kharif*) and drainage congestion are the other major biophysical problems in these areas. These problems are also compounded by natural disasters like cyclone, sea water intrusion, drought and flood etc. The situation is expected to be grave. West Bengal has the largest area (0.82 million hectares) under salt-affected soils (Mitra *et al.*, 2014). Coastal erosion and land degradation due to sea water inundation coupled with salinization with extreme climate events like Aila, Yash and natural occurrence of acid sulphate soils in places is a huge challenge for the researcher, developer and planner to upkeep productivity and control soil degradation in coastal ecosystem of Sundarban delta, India. Land use change contributed significantly to greenhouse gas emission (GHGs) of CH₄, N₂O and CO₂ and agricultural sector contributed around 15% in India. There are lot of technology developed for emission reduction through adaptation and mitigation and no studies have been conducted on increase in C-stock under land use/land cover change which can keep temperature rise below 1.5°C and to reduce GHG emission by 30% by 2024 as set by IPCC, 2015, Paris agreement. Though appropriate land shaping technologies in salt affected soils of these ecosystems is a proven fact for productivity augmentation but conservation agriculture (CA) practices should be included for high value medicinal plants, drip irrigation system, poly-house cultivation, bio-gas generation and rain water harvesting (RWH). N saving is priority for N₂O emission reduction and large scale use of neem coated urea, all these technology require priority up-scaling. Alternate use of inorganic fertilizer as biofertilizer like PSB, KSB need to be promoted. Phyco-remediation is the need of the hour for salinity reduction. INM is required for deep soil carbon sequestration. Standardization of drone based nano urea application as top dressing not only generates rural employment but also N use efficacy and productivity. Customised agricultural equipment use from crop sowing to harvesting will reduced cost of cultivation, generate employment. Effective implementation of the technologies of zero tillage seed drill, light weight machine for harvesting and processing will reduce C emission. Rice is highly water consuming and exporting crops, so efficient water conveyance/ use efficient method like sprinkler, rainwater harvesting and recycling technique should be introduced. Coastal region soil carbon is a problem and water is not a problem, main problem in this region is drainage. Rice-fallow is another big issue to resolve. Introduction of Rice- lentil/mungbean/sunflower instead of rice-fallow in low land areas is a priority area. Rice- rice-rice system in coastal region is another big issue which created arsenic (As) contamination in drinking water causing human health problem. So alternate crops for second rice is priority arrears which require immediate attention.

Soil compaction, both surface and sub-surface is the major soil physical problem after soil erosion. So we need to elevate sub surface compaction without causing much soil loss, much fissile fuel and pollute environment. In this region, climate change adaptation and mitigation research should be soil centric. For instance a sandy soil

will behave much differently compare to a silty clay loam or clay loam soil. Acid sulphate soils management should be adopted appropriately with the adoption of appropriate variety and water regime. On-farm water management and water application using system powered by solar energy should be given highest priority and on-farm energy conservation using wind power. With sea level rise, these coastal areas are very vulnerable; special advance research programme is required for mangrove plantation, survival, and benefit in carbon sequestration potential. Mangrove vegetation contributions to local livelihood and low C emission data set require. More land shaping technology requires to be researched for reclamation of coastal inundated saline soil and productivity enhancement. Terminal heat stress control using different chemical like anti transpirant, arsenic issues in these areas, Si issues in rice based system, heavy metal remediation, foliar spray of Zn, S and vermicast application for rice research for carbon sequestration estimation should be prioritise. Alternate source of soil amendments like steel slag, fly ash, sugarcane bagasse, phosphogypsum and yellow gypsum use require intensive evaluation for recycling. Advance water management as sub-surface irrigation should be given highest priority. Soil microbial feed back to climate change as mediated by biotic interaction is also needed. Trading water for bio-energy plantation/crop establishment is also a priority area. Watershed basis intervention for soil degradation control can increase cropping intensity, rural employment generation and climate change mitigation and adaptation. Rejuvenation of PMKSYM for district irrigation plan for productivity enhancement and livelihood security in relation to water harvesting structure and quality of rain water and runoff water for recycling. Identify hot spots of land use /land cover change and the drivers of change should be studied. A case study in Gosaba block of the Sundarban areas having both the soils (saline and acid sulphate) is suggested for optimum soil resource management to control degradation (Table 1). Assessing livelihood ecosystem interdependencies and natural resource governances in villages of coastal region of Sundarban delta is the areas of research. To build climate smart village, interpretation of satellite data of villages to see economic and ecological benefit and regional environmental change. Effects of community forestry programme on bio-diversity conservation and C storage can be monitored and assessing village C balance due to GHGs mitigation intervention. There is a great potential of solar energy for C mitigation in coastal region of Sundarban, India.

Table 1. Suggested land use planning and management practices in Gosaba block, 24 Parganas (South) for study area.

Problems	Applicable technology	Suggested Land use	Fertility Management
	Farm pond		
Poorly drained, severe salinity, moderately acidic and high nutrients Toxicity		<ol style="list-style-type: none"> 1. Paddy-fishery-livestock/ poultry-duckery (<i>kharif</i>) 2. Vegetables- cucurbits, tomato, brinjal, sweet potato and vegetables (<i>rabi</i>) 3. Agro-forestry plantation- <i>Casuarinas</i>, <i>Eucalyptus</i> and <i>Acacia</i> (bunds) 	<ol style="list-style-type: none"> 1. Integrated Nutrient Management (INM), 2. Straw mulching 3. Drip and sprinkler irrigation leafy 4. Nitrogen fertilizer placed in sub-surface (10-15 cm depth) of the soils to reduce the volatilization process.
Poorly drained, moderately saline, severe acidic and medium nutrients toxicity and lower layers have acid sulphate materials	<ol style="list-style-type: none"> 1. Deep furrow and high ridge 2. Shallow furrow and medium Ridges 	<ol style="list-style-type: none"> 1. Paddy-fishery (<i>kharif</i>) 2. Pulses, sunflower, chilli and ground nut (<i>rabi</i>) 4. FYM/ vermicompost 5. tables fertilizers 	<ol style="list-style-type: none"> 1. Slow releasing fertilizers 2. Urea inhibitor 3. N-fertilizer mixed with <p>Maintaining high water</p> <p>Addition of lime and P</p>

Moderately well drained, very slight saline, moderately acidic and high nutrient toxicity	1. Deep furrow and high ridge 2. Shallow furrow and medium Ridges	1. Paddy (<i>kharif</i>) 2. Paddy, pulses, sunflower, and chilli (<i>rabi</i>) 3. Irrigation 4. organic manures	1. Improved fertilizers efficiency vegetables 2. Drip and sprinkler 3. N-fertilizers mixed with
Moderately well drained, very slightly saline, moderately acidic and high nutrients toxicity	1. Deep furrow and high ridge 2. fertilizer	1. Paddy-vegetables (<i>kharif</i>) 2. Paddy, vegetables, pulses, chilli and sunflower 3. Basal application of P	1. INM 2. Mulching 3. Water efficiency
Imperfectly drained, slightly saline, moderately acidic and high nutrients toxicity and lower layers have acid sulphate materials	1. Farm pond	1. Paddy-fishery-livestock/poultry-duckery 2. (<i>kharif</i>) Paddy-vegetables (<i>rabi</i>)	1. N-fertilizer mixed with organic manures 2. Nitrogen fertilizer placed in subsurface (10-15cm depth) of the soils to reduce the volatilization process. 3. Drip and sprinkler irrigation 4. Maintaining high water tables 5. Addition of lime and P fertilizers
Imperfectly poorly drained, moderately saline, severe acidic and medium nutrient toxicity	1. Farm pond 2. Deep furrow and high ridge	1. Paddy-fishery (<i>kharif</i>) 2. Vegetables (<i>rabi</i>) 3. Fruit/plantation crops- Coconut, sapota, guava, jamun and cashew	1. Basal application of P fertilizer 2. Urea inhibitor 3. INM 4. Addition of organic manures 5. Fertigation

In conclusion, sustainable agricultural techniques and land shaping in agricultural land are mostly required in the coastal belts of Sundarban to reduce the crop failure and adapt the changing climate. Alternative energy sources should be used to mitigate the climate change rather than fossil fuel. A huge number of green vegetation should be introduced in Sundarban coastal belt to save it from erosion and other natural calamities. Alternative income sources should be generated to secure the livelihood of Sundarban dwellers.



The Mangrove, the guardian of Sundarban



The Royal Bengal Tiger

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EFFECTIVENESS OF MUSIC THERAPY ON CANCER PATIENTS UNDER CHEMOTHERAPY

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The role of music in therapy is not different from the role of music in the life of humans. The impact of music on human behavior has been discussed and documented throughout history. The significance of music in both our cultural heritage and our daily lives has been affirmed through countless examples. References to music's universality, magic and myths confirm the belief that music has the potential to influence human behavior in a deeper way. Cancer is such a chronic disease that not only damages our physical structure. But it also has certain other side effects such as anxiety, severe pain and in some cases even depression. Music therapy can be a safe place for people to explore fear, anxiety, anger and the range of emotional responses to living with cancer. Music makes cancer patients feel good, as listening to a favorite piece of music can prove to be calming and relaxing. It encourages patients to communicate with the outer world.

Keywords: - Music, Therapy, Cancer, Chemotherapy, Effect

Music is the art of combining tones in a manner to please the ears. It may also mean sounds so combined as to make a pleasant impression on the mind. Music paves the way for the absorption of the mind in the supreme. In fact, it is an innocent and refining diversion. Music is the oldest form of expression, older than language or art: it begins with the voice and with our overwhelming need to reach out to others. Music leads to spirituality. The climax of music reaches bliss. Our *Rishi's* and *Muni's* preached us (morality) to construct a civilized society. This morality can be achieved by music. Bhajans, abhyanga, kirtans and folk music are some type of music that touches the tender core of the heart. The practice and study of music result in community development. It serves the community, state and nation by harnessing the capacity to parents and children to work together cooperatively on projects relating to home and community.

It develops the social aspect of life. In addition to this when people become very tense and stressed in the complexities of life, music soothes them. "Due to unhealthy living style, uncontrolled food habits, disappointments, frustrations in life, liquor consumption, smoking and drug addictions, undue tensions stress etc. has resulted in various physical and mental disorders."ⁱ

The role of music in therapy is not different from the role of music in the life of humans. Some have boldly pronounced that music defies the laws of nature, with its "charms to soothe the savage breast, to soften rocks, or bend a knotted oak". Music has an emotional effect on people and has been used to lift the mood. A mood is an emotional state but mood is different from emotions. Music has an emotional effect on people to find relaxing, soothing and enjoyable lifestyle. According to Plato "Music is a moral law, it gives soul to the universe, wings to the mind, flight to the imagination, a charm of sadness, gaiety and life of everything."ⁱⁱ

Psychology is the study of the human mind. It studies human behavior in a systematic and objective way. Similar is the case with music as it is a sound effect human mind as well as body and ultimately human behavior. Our mind, our body the nature in which we live, the nature that has made us, and all that is beneath and around us it is all music. The psychology of music is exclusively concerned with the awakening of the flashes of the primal psychic force center. The study of the primal psychology of music brings to us a clear understanding as well as intuitive perception & utility and importance of the force center and gives a full realization of the real object & an idea of the musical contest. Music is a prime necessity of life. Its study and practice give elegance, grace, gentleness and refinements to the person. Music effects on the nervous system and the brain of the human. Music helps in reduction in fatigue, stimulation of the depressed feeling among the mentally and physically handicapped persons. Relieving tension and arousing happiness, courage and energy are among the psychic effects that music induces. "Psychology of music, even in a narrow sense is unlimited because involves countless varieties of musical performances, countless varieties, urges and interests of the listener."ⁱⁱⁱ

Music is the emotional presentation of sounds or succession of sounds of tones-an emotional symbolism of man's inner depth. Sound is the most powerful medium to express emotions. When the colorful tones are presented, both the musicians and the listeners cannot but help express their mental attitudes outwardly by the movements of heads and limbs. A raga is an emotional product or emotive manifestation of the mental attitudes and so it expresses the aesthetic feelings of love, devotion, anger, hatred, egoism etc. The expression may be defined as verbal, facial or physical responses that are indicative of the emotional state of the individual. Emotions motivate the development of moral behavior, which lies at the very roots of civilization. Emotion implies a certain relationship between a person and the object or events. Music can be regarded as a medium for expressing thoughts and feelings through tones expressing thoughts and feelings music that combine to achieve this effect are melody, rhythm and harmony. Their combination gives rise to musical form. Music is the most intimate and fullest expression of human nature.

- Health is a condition of perfect rhythm and tone. Music is rhythm and tone. It is the rhythm that is being created. It is the tone of that music that tunes a soul and raises it above the depression and despair of everyday life in this world.
- "Every cell within our body is a sound resonator. It has the capability of responding to any other sound outside of the body. The various systems in the body will also respond to sound vibration; the human body is a bio-electrical system. The bio-electrical energy is created in varying frequencies through muscular actions and can be altered, and strengthened of balance through the use of sacred sound."^{iv}
- A raga is a complex structure of musical melody used in Indian classical music. It is a set of rules of how to build a melody that can ignite a certain mood in the reciter and listeners. Ragas have a direct relationship to human moods.

AMTA (American Music Therapy Association) is the single largest music therapy association in the world, representing music therapists in the United States and in over 30 countries around the globe. The purpose of the AMTA International Relations Committee is to promote networking between music therapists around the world and to facilitate awareness of international issues among AMTA members both within the United States and abroad.

"Cancer is the most dangerous disease. Under its preview, different types of harmful tumors can be defined. All these types of tumors develop due to unusual development in a single cell or a group of a single cell in the human body. However, heart disease is regarded as the most dangerous disease in the world. Cancer may be regarded as the second most dangerous disease that can lead even more than, two hundred different types of cancers and other harmful diseases."^v Cancer is a group of diseases involving abnormal cell growth with the potential to invade or spread to other parts of the body.

The main symptoms of Cancer are sore throat, Changes in urinary secretion, In Females, the side of the vagina become hard, Difficulty in the digestion of food, Losing weight, Females, changes in the menstrual cycle, Changes in skin tag or moles etc. The main causes of cancer Diseases are Tobacco, smoking, and drinking Cancer is often treated with some combination of radiation therapy, surgery, chemotherapy and targeted therapy. Sun and UV, Air pollution and Radon, Infection and HPV, Inherited genes, Hormones, Work place causes, Alcohol, Smoking, Physical Activity, Diet and healthy eating, Obesity and weight etc.

There are many types of cancer treatment. But Chemotherapy is more effective and popular than any other research. At present age the most usual treatment of cancer is done through chemotherapy. In it the chemotherapeutic drug, travel through the bloodstream and lymph channels to pursue and destroy cancer cells. Chemotherapy interferes with the division and reproduction of cancer cells. Once cells can't divide, they will fall apart, and the tumor will stop growing and begin to shrink. The cells don't all divide at the same time or rate, and some even rest after division. If various chemotherapeutic drugs are combined and used simultaneously, cancer cells can be attacked at different stages during the division process.

The timing of chemotherapy can make the difference between a cure, temporary control and no control at all. Generally, chemotherapy is begun two to three weeks after surgery. The time-lapse gives the patient time to recuperate. Chemotherapy drugs are usually administered through the veins. With the intravenous (IV) push method, the drugs are injected directly into a vein. A small needle attached to three to five inches of tubing is inserted into a vein, with the other end of the tubing connected to a syringe containing the medication. The procedure takes five to ten minutes and is usually done in a doctor's office. Some Chemotherapy drugs kill dividing cells by damaging the part of the control center inside each cell that makes it divide. Chemotherapy usually starts within 4-12 weeks after surgery. It is commonly given on a 21 or 28-day cycle. Drugs are

generally given weekly or once every third week, with a rest period to allow your body to recover. The length of the cycle will depend on the type of drugs used. The length of the treatment period will vary, but it often lasts from 3 to 6 months.

“Music intervention is a complementary profession and one of the expressive therapies, consisting of a process in which a music therapist uses music and its different facets to help an individual through his motor skills, experiences and expertise.”^{vi} Music therapy for cancer patients is the result of modern research. It helps the patients in handling their emotions well music is the most fundamental and unique form of art that is used to benefit patients in complex conditions that also affect people psychologically, spiritually, socially, physically and emotionally. No doubt, it can be defined in a various way but its target of it's remaining the same. Music therapy does not actually affect the disease itself. But the real great impact on patient's mood and helps them to cope with the feeling of the disease.

Physiological and psychological diseases are the defined side effects of cancer, which music therapy actually helps to arise from. Most of the studies defined that such symptoms as anxiety and pain are the side effects of chemotherapy and radiation therapy in which music therapy works and get relieves the patients from the same. Other symptoms that can be cured by music therapy are relaxation mood disturbance and quality of life. Music therapy is the new field for cancer care but a number of fields such as psychiatry, learning disabilities, general medicine and neurology are some areas in which the cure from music therapy is being worked on for a very long time ago and the resulting form it is very effective.

MAIN FINDINGS AND CONCLUSION

- The purpose of this study was to explore whether music therapy can reduce the effects of cancer on patients who are receiving chemotherapy.
- The study found that there is a significant improvement in anxiety and mood of a cancer patient and is also able to measure small improvements in heart rate, respiratory rate, blood pressure and pain.
- The investigator did not have enough information to tell them whether music therapy or listening to recorded music was more effective. But they found that either technique improved cancer patients' quality of life.

CONCLUSION

It is obvious that every human wants to live happily but we do things that aren't good for us, but we put ourselves through voluntary and suffering all in the name of comfort. We don't know these things are damaging us, because we have been habitual. These circumstances are creating physical, mental, psychological, emotional and spiritual problems among people and depression is the most common ailment. No one is sure about the causes of cancer. Listening to music is an excellent pleasure. Music is the most precious contribution to individuals undergoing cancer treatment. The investigator did not have enough information to tell them whether music therapy or listening to recorded music was more effective. But they found that either technique improved cancer patients' quality of life.

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IMPLICATIONS OF REGIONAL DEVICE RESTRUCTURING ON REGIONAL EXPENDITURES OF ALOR DISTRICT

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ABSTRACT

This study uses a qualitative descriptive method located at the Regional Secretariat through the Organization Section, the Regional Finance and Assets Agency and the Regional Planning and Research Agency of Alor Regency with 14 informants who were determined purposively with primary data and secondary data sourced from interviews, observations and documentation. . Then the data was analyzed using data analysis techniques from Miles, Huberman and Saldana (2014:14) through the stages of data condensation (data condensation), presenting data (data display), and drawing conclusions or verification (conclusion drawing and verification). The implications of the restructuring of regional apparatus on regional expenditures within the Alor Regency Government are found that; (1) there are several accommodations for affairs in regional apparatus that have not yet fully created harmony in achieving the regional vision and mission, (2) there are affairs that are managed as the same function from several positions, (3) there is misplacement, namely the implementation of activities that are not in accordance with the functions organization, namely the implementation of technical activities in several parts of the Regional Secretariat, while the ideal function of the Secretariat is to coordinate, formulate policies and administrative services and (4) there are several problems with the size of the structure that is not suitable, low productivity and inefficiency.

Keywords: Restructuring, Region, Regional Apparatus Organization.

FOREWORD

The establishment of the Regional Apparatus Organization is stipulated by a Regional Regulation based on Government Regulation no. 18 of 2016 concerning Regional Apparatus. The Government Regulation in principle provides clear directions and guidelines for regions in managing regional apparatus efficiently, effectively, and rationally in accordance with the real needs and capabilities of each region as well as coordination, integration, synchronization and simplification as well as institutional communication between the center and regions. This is in line with the opinion of Osborne and Plastrik (2001:16-17) which states that the transformation of government systems and organizations is fundamentally in order to create a dramatic increase in their effectiveness, efficiency and ability to innovate.

At the end of 2016 the Alor Regency Government has carried out the mandate of Government Regulation Number 18 of 2016 concerning Regional Apparatuses by stipulating Regional Regulation Number 8 of 2016 concerning Formation and Composition of Alor Regency Regional Apparatus.

However, there are bureaucratic problems faced by the Alor Regency government in connection with the restructuring based on Government Regulation Number 18 of 2016 namely; (1) in the institutional aspect there is swelling of the institutional structure. This will lead to budget inefficiency, (2) Limited Apparatus Human Resources where in the results of job analysis and workload analysis in the Alor Regency government environment in 2018 the number of civil servant needed is 11,560 employees while the current civil servant is 4,760 employees, so there are still experienced a large number of staff shortages. In addition, there is an unequal distribution of human resources and is not based on the workload of regional officials. Furthermore, this condition results in the implementation of duties and functions not being supported by adequate implementing elements/staff, (3) Low regional financial resources where the results of the evaluation of the Minister of Finance of the Republic of Indonesia in 2019 regarding the Regional Fiscal Capacity Map said that the fiscal capacity of the Alor Regency area was in the Very Low category. Many organizational structures are not supported by the budget to support the implementation of the functions of government affairs, (4) have not yet institutionalized the characteristics of good governance within the regional government, both in terms of structure and culture as well as the incoherence of various programs and activities between regional organizational units. Until now, the application of good governance principles in local government is still purely sloganistic. (5) The problem of professionalism does not work, so that it affects institutions, (6) Duplication and overlapping of tasks and functions between work units so as not to create institutional coherence. The dynamics of community development is very fast, with increasingly multidimensional problems requiring the Alor Regency government to handle regional problems appropriately and professionally.

According to Robbins (1994:89-90) that in fact, nowadays it is difficult to find a well-managed organization that does not restructure to cut costs, become more responsive to customers and competitors, or to achieve more or less the same goals. Therefore, researchers are interested in knowing more about the restructuring of regional apparatus within the Alor Regency Government, so this research was formulated with the title "Implications of Restructuring Regional Apparatuses on Regional Expenditures in Alor Regency". The organizational restructuring of the regional apparatus carried out by the Alor Regency Government will be analyzed through changes in the dimensions of the organizational structure by Robbins (1994:89-91), which consists of complexity, formalization and centralization.

LITERATURE REVIEW

Organization Concept

There are several classical theories that explain the organization, one of which is put forward by Weber in The Theory of Social and Economic Organization; Weber in Thoha (1996:98) said "organizations as cooperative groups, which are different from community organizations". According to Weber, the cooperative group is a system of social relations that are connected and limited by rules. These rules as far as possible can force a person to perform work as a steady function, whether carried out by the leader or by other administrative employees.

Furthermore, according to Robbins (1994:91-92) in the organization can be distinguished three kinds of differentiation, namely horizontal differentiation, vertical differentiation and spatial differentiation with the following details:

1. Horizontal Differentiation.

Consider the degree of horizontal separation among organizational units based on differences in orientation of organizational units, tasks, functions, education, expertise and so on. The cause of horizontal differentiation is related to the dynamics of organizational development through its stages of growth. Horizontal differentiation gives birth to specialization and departmentation. Specialization refers to a particular grouping of activities that an individual performs in an organization. The form of specialization consists of functional specialization and social specialization. The definition of departmentation refers to the grouping based on the specializations that exist within the organization, both functional and social specialties. The thing that is a concern in the complexity of an organization is whether it is in a high or low position of complexity. The level of complexity, especially if it is high, will have consequences for the need for activities from the leadership element to control, communication and coordination mechanisms.

2. Vertical Differentiation

Refers to the depth of the organizational hierarchy. The higher the hierarchical level in the organizational structure, the higher the complexity and the greater the potential for distortion of communication from high-level management to the lowest organizational unit. One thing to note from this differentiation is the span of control, namely how many organizational units can be formed effectively by the organizational unit above it. The more complex the work, the smaller the span of control required in supervision. In the practice of structuring government organizations, it is necessary to pay attention to this dimension of vertical differentiation.

3. Spatial Differentiation

Refers to the degree to which the location of an organization's facilities and employees are geographically dispersed. The farther away and the more geographical locations, facilities, and distribution of organizational units, the higher the complexity of the organization. Spatial differentiation is an important consideration in the administration of government in Indonesia, especially in the institutional arrangement of government agencies.

Formalization

According to Robbins (1994:103) formalization refers to the degree to which work within the organization is standardized. From this definition it can be interpreted that formalization is a condition in which the rules, procedures, instructions, and communication are standardized. High formalization will increase complexity. Formalization is something that is important for organizations because standardization will achieve consistent and uniform products and reduce unnecessary errors. In addition, formalization will facilitate coordination between parts/organizational units in producing a product or service. Formalization in organizational restructuring is a process of uniformity through standardized rules, procedures, instructions and communications.

Organizational Restructuring

According to Sedarmayanti (2000:60), restructuring efforts in an organization can be carried out through management efforts by rearranging or reengineering so that the company is expected to be able to adapt to the effects of environmental changes, so that the company will survive. Furthermore, Sedarmayanti (2000:71) also suggests organizational restructuring includes several aspects, namely aspects of organizational performance, operational cooperation, work systems and procedures as well as delegation of authority and autonomy. Meanwhile, in a broad sense, it covers all aspects of the company that greatly affect the company's productivity, which includes: human resources, financial resources, and other resources including facilities and infrastructure. According to Nugroho (2004:15) restructuring means "rearrangement, with this new understanding it is necessary to rearrange public organizations" while according to Ingraham & Romzek (1994) in Wasistiono (2002:44) Reinventing is defined as "fundamental redesign of the system of government, the civil service system".

Organizational restructuring (organizational design) can be defined as the formal mechanisms by which organizations are managed. The organizational structure shows the framework and arrangement of the embodiment of a fixed pattern of relationships between functions, sections or positions as well as people who indicate the different duties of authority and responsibilities within an organization (Handoko, 2006:33). The importance of organizational structure is stated by Gitosudarmo (2001: 67), that the competitive advantage of an organization is determined, among other things, by a lean structure "lean and mean" or in another language called "poor structure rich in functions". This is in line with the perspective of Osborn and Gaebler, namely with a shift in the role of the government from "rowing" to rowing to "steering" directing the government bureaucratic organization must also be able to adapt it. Bureaucratic restructuring must also be able to produce a structure that is lean, flexible, responsive, and efficient.

Regional Financial Performance

Regional Government Financial Performance is the output or result of activities or programs that will be or have been achieved in connection with the use of regional budgets with measurable quantity and quality, regional capabilities can be measured by assessing the efficiency of services provided to the community (Sumarjo, 2010). The Regional Government as the party given the task of running the government, development and public services is required to report financial accountability for the resources collected from the community as the basis for evaluating its financial performance. One of the tools to analyze the Financial Performance of Local Governments in managing their regional finances is to conduct a financial analysis of the APBD that has been determined and implemented (Halim, 2007:231).

Analysis of regional expenditures is very important to do to assess whether it has been carried out economically, efficiently, and effectively. The extent to which local governments have implemented budget efficiency, avoiding unnecessary spending and spending that is not on target. It is hoped that the Regional Government will be able to implement performance-based budgeting efficiently for each of its expenditures. The government no longer needs to be oriented to spending the budget, which results in budget wastage, but should be oriented to the output and outcome of the budget (Mahmudi, 2016:154).

Based on the information in the Budget Realization Report, expenditure analysis can be carried out, including:

1. Expenditure Variant Analysis

In the case of regional expenditures, there is a provision that the expenditure budget is the maximum limit of expenditures that may be made by the regional government. The performance of the local government is considered good if the local government is able to make spending efficiency. On the other hand, if the actual expenditure is greater than the budgeted amount, it indicates a poor budget performance. Analysis of variance is an analysis of the difference or difference between the realization of expenditure and the budget.

2. Compatibility Ratio

Harmony Analysis is a ratio that describes the activities of local governments in prioritizing their allocation of funds to routine and capital expenditures optimally. The higher the percentage of funds allocated for routine spending means the percentage of investment spending used to provide economic infrastructure for the community is getting smaller (Halim, 2012: 68).

a. Operational Expenditure Analysis on Total Expenditure

Analysis of operating expenditure on total expenditure is a comparison between total operating expenditure and total regional expenditure. This ratio informs the portion of regional expenditure allocated for operating expenditure. Operational expenditures are expenditures whose benefits are exhausted in one budget period, so that operating expenditures are short-term in nature and in certain cases are routine or recurring. In general, the

proportion of operating expenditures dominates the total regional expenditures, which is around 60-90 percent. Usually, regions with high regional income tend to have a higher portion of operating expenditures compared to regions with low regional income levels (Mahmudi, 2016: 54).

b. Capital Expenditure Analysis on Total Expenditure

Analysis of capital expenditure on total expenditure is the ratio between total realized capital expenditure and total regional expenditure. This ratio can be used to determine the portion of regional expenditure allocated for investment in the form of capital expenditure in the relevant fiscal year. Where this capital expenditure will provide medium and long term benefits. In addition, this capital expenditure is not routinely carried out. This capital expenditure will affect the regional government's balance sheet, namely increasing regional assets. In contrast to operating expenditures, local governments with low levels of regional income in general actually have a higher proportion of capital expenditures than local governments with high income levels. This is because local governments with low incomes are oriented to actively conduct capital expenditures as part of long-term capital investment, while local governments with high incomes usually have sufficient capital assets. In general, the proportion of capital expenditure to total regional expenditure is between 5-20 percent (Mahmudi, 2016:55).

3. Shopping Efficiency Ratio

This ratio in the Regional Expenditure Efficiency Analysis is used to measure the level of budget savings made by local governments. Local governments are considered to have implemented budget efficiency if the efficiency ratio is less than 100 percent. On the other hand, if more than percent indicates a budget waste (Mahmudi, 2016).

Therefore, in the study "Implications of Restructuring Regional Apparatus on Regional Expenditures in Alor Regency", especially the analysis related to regional expenditures focuses on the compatibility ratio (the ratio of capital expenditure to total expenditure and the ratio of operating expenditure to total expenditure) and the efficiency ratio of spending.

a. Operational Expenditure Analysis on Total Expenditure

Analysis of operating expenditure on total expenditure is a comparison between total operating expenditure and regional expenditure. This ratio informs the portion of regional expenditures allocated for operating expenditures.

b. Analysis of Capital Expenditure On Total Regional Expenditure

Analysis of capital expenditure on total expenditure is the ratio between total realized capital expenditure and total regional expenditure. This ratio can be used to determine the portion of regional expenditure allocated for investment in the form of capital expenditure in the relevant fiscal year.

c. Shopping Efficiency Ratio

This ratio in the Regional Expenditure Efficiency Analysis is used to measure the level of budget savings made by local governments.

RESEARCH METHODS

This study uses a qualitative descriptive method located at the Regional Secretariat through the Organization Section, the Regional Finance and Assets Agency and the Regional Planning and Research Agency of Alor Regency with 14 informants who were determined purposively with the types of primary data and secondary data sourced from interviews, observations and documentation which is then analyzed using data analysis techniques from Miles, Huberman and Saldana (2014:14) through the stages of data condensation (data condensation), presenting data (data display), and drawing conclusions or verification (conclusion drawing and verification).

RESEARCH RESULT

Organizational Restructuring of Alor District Government Regional Apparatuses

To analyze the organizational restructuring of regional apparatus carried out by the Alor Regency Government, the author uses the opinion of Robbins (1994:89-91) which states that changes in the dimensions of the organizational structure consist of; (1) complexity, (2) formalization and (3) centralization with the results of research and discussion as follows:

1. Complexity

Complexity refers to the number of activities or subsystems in the organization. These activities are represented in terms of the number of functions (eg jobs or specializations) performed in an organization (Daft 2013; Griffin

& Moorhead 2014; Wang & Tai 2003). As a result, Daft (1992) and Anderson (1999) identify three measures of complexity that are operationalized in the organizational context as vertical differentiation, horizontal differentiation and spatial differentiation with the following research results and discussion:

a. Horizontal Differentiation

Based on the research, it is known that the policy of structuring the regional apparatus of Alor Regency has an impact on increasing the number of affairs and shifting affairs in certain regional apparatus organizations. This has an impact on the implementation of the horizontal differentiation dimension that has been carried out by the Alor Regency Government not running effectively because many of the structures formed are not supported by an adequate budget. Currently, regional apparatus organizations need to be reorganized and adjusted to right sizing or restructuring. Restructuring efforts in the organization of the regional apparatus of Alor Regency can be carried out through management efforts by restructuring or reengineering so that public organizations are expected to be able to adapt to the effects of environmental changes and the organization will survive (Sedarmayanti, 2000: 60; Nugroho, 2003). 2004:15; Wasistiono, 2002:44). According to Bennis & Mische (1999:13) to optimize the organizational competitiveness, increase value for stakeholders, and contribute to society. Although Government Regulation Number 18 of 2016 indicates that the determination of the size of regional apparatus becomes the regional authority based on regional needs and regional financial capacity, the authors find that the current number of regional apparatus in Alor Regency is greater than regional apparatus based on Government Regulation Number 41 of 2007 and has a very large potential to burden regional finances.

b. Vertical Differentiation

The level of authority in the organization is described using vertical differentiation in a hierarchical form (Stacy & Mowles 2016) and in the results of the study it was found that the current number of structural

levels is ideal and in accordance with applicable regulations and rules, where the hierarchical level is owned with three echelon levels (II, III and IV). It is even shorter than the echelon level of regional apparatus based on Government Regulation Number 41 of 2007, which is still known as echelon V. This means that Government Regulation Number 18 of 2016 requires a shorter or simpler position level and the changes made are in accordance with the applicable chairman and are expected to be able to create an effective and efficient Regional Government administration. This phenomenon can be stated positively when referring to the opinion of Hodge and Anthony (1988) who explain that for vertical differentiation, the more levels, the greater the potential for coordination and integration problems because the determining factor is the span of control (Robbins, 1994:96). Differentiation will increase along with increasing complexity because the number of hierarchical levels in the organization increases (Robbins, 1994:95). Therefore, task specialization is needed or also known as functional specialization (Pugh et al, 1969; Robbins, 1990). This type of specialization is closely related to the concept of shortening the scope of work (Dewar et al, 1980).

c. Spatial Differentiation

This spatial differentiation is described as the level of geographical distribution experienced by an organization (Mohrman, 2007) and based on the results of the research it is known that structural changes have become a problem of coordination, namely the distance between one work unit and another. This happened at the Alor District Education Office where there was a Service Technical Implementation Unit, which was far from the Head Office. In addition to the Education Office, there are also Regional Offices, which have Service Technical Implementation Units that are far from the Head Office, such as the Health Office and the Livestock Service Office of Alor Regency. This causes the coordination between the Technical Implementation Unit of the Service and the Head Office related to activities that are not effective for the implementation of regional government due to the lack of personnel at the Central Office for direct coordination and supervision.

2. Formalization

Robbins (1994:103) states that formalization refers to the degree to which work within the organization is standardized. The techniques for measuring the dimensions of the organizational structure are selection, role requirements, regulations, and policies, and training with the results of research and discussion as follows:

a. Selection

At the selection stage where in general the recruitment of employees is carried out selectively based on competency/expertise requirements. Every employee who will be accepted in the regional apparatus organization will follow the administrative and technical selection as required for the positions that will be filled later. The selection process to the process of accepting new employees within the Alor Regency government can be said to have been effective for the process of administering local government because the newly accepted employees have been tested and carried out the selection stages in accordance with applicable regulations.

There is an interesting thing that within the Alor Regency Government, apart from civil servants, that there are inorganic personnel, namely Regional Honorary Personnel and Training Personnel. Specifically for training staff, they are usually not paid monthly or daily wages and the leadership's policy is to accommodate people who apply as training staff without going through a selection. This is important to do because in bureaucratic or very formal organizations, selection is carried out using the same inputs and methods, so as to achieve consistent and uniform output (Liao et al, 2011). A good selection process in addition to increasing task autonomy and innovation, flexible work processes can also assist organizations in adopting contingency management strategies in an unstable operating environment, thus providing the basis for a good organic structure (Burns & Stalker, 1961; Wilden et.al, 2013).

b. Role Requirements

At the stage of role requirements, giving staff the freedom to create and innovate is the main thing in their work so that staff can work comfortably without any pressure and can bring up new creations and as long as they do not violate the rules and the work can be completed in accordance with existing regulations because employee behavior and task processes that are not programmed or understand role requirements can make organizational performance relatively low (Pertusa-Ortega et al. 2010).

c. Job Description

In the job description stage, it is known that the main tasks and functions have been distributed and there are some employees who understand the job well as evidenced by the smoothness of daily work. Such characterization involves explicit job descriptions, high volume of organizational rules and clear procedures regarding work processes (Jones 2010:31). So far, an incumbent has exercised a limited amount of discretion in terms of job descriptions and the modalities for achieving them (Daft 2013; Griffin & Moorhead 2014; Patel 2011). In other words, what is to be done, when it is to be done and how it is to be done is specified in the rules and procedures document and all that is required of the job titleholder is to act strictly according to the rules and procedures. Such regulated behavior does not allow employees to carry out any form of autonomy or work innovation, although there are also employees who do not know their respective job descriptions. This is because the ability to master tasks and job descriptions is strongly influenced by the level of education and expertise of the employee concerned so that not all existing employees have an understanding and mastery of the job description.

d. Regulation

At the regulatory stage where formalization is often measured by considering only the volume of administrative procedures established to guide behavior and operations within the organization. One of the widely recognized attributes of the modern organizational structure is the extent to which tasks and functions are defined and formalized (Lindner & Wald, 2011; Patel, 2011) and it was found that some employees who have a good understanding of the applicable regulations to support the implementation main tasks and functions of the organization. But there are also employees who do not understand these regulations well. This is due to the mentality of employees who do not have interest in reading, lack of socialization or technical guidance on the newly issued regulations.

e. Procedures And Mechanisms of Management

Management procedures and mechanisms where several empirical studies (Willem & Buelens, 2009) have provided support regarding the relationship between procedures, management mechanisms and company performance in a dynamic environment which in the author's findings that there has been a suitability of procedures and management mechanisms have been in accordance with organizational needs Currently, although many Alor Regency Apparatus Organizations have not developed standardized SOPs in the form of Decrees for each Regional Apparatus Leader.

f. Policy And Policy Implementation

In implementing organizational policies, it is known that within the Alor Regency government there are obstacles such as limited resources such as budget, human resources and other supporting infrastructure, while the organization needs to be managed through established procedures, rules, regulations, and operational policies. These administrative procedures are fully documented and the extent to which they determine the intensity of formalization within the organization (Daft 2013; Griffin & Moorhead 2014; Liao, Chuang & To 2011).

g. Training

In the training activities, a phenomenon was found that the average state civil apparatus in the Alor Regency Government has not received managerial training or technical training to improve employee competence. The

factor of limited regional budgets is the main cause of state civil servants not receiving training evenly and periodically.

3. Centralization

Robbins (1994: 118), defines centralization as the level to which formal power to make choices is freely concentrated on an individual, unit, or level (usually high in the organization), thereby allowing employees (usually at low levels in organizations) to provide minimal input into their work. Centralization describes the central position of the decision maker. The centralized focus of this research is centered on:

a. Decision-Making

How is the decision-making authority process, according to Kaho (2002: 209) as one of the organizational principles which in its implementation within the Alor Regency Government is the fact that at every level of the organizational hierarchy is given full authority to make decisions according to their duties and functions, usually members of the organization continue to coordinate with the leadership in stages so as not to make mistakes in making decisions. Most of the OPD are good at delegation of authority in decision-making. This is important because managers at different levels of authority assume responsibility for exercising decision-making power according to their position in the organizational hierarchy. In some organizations, decisions are negatively concentrated at the center (eg head office), while in others; power is positively delegated (decentralized) at all levels of authority (Scattolini, 2009). Centralization thus describes the way decision-making power is distributed in relation to the allocation of resources within an organization (Daft, 2013; Griffin & Moorhead, 2014; Tsai 2002) but there are some OPDs where all organizational affairs rest only on the top leadership. This can happen because the leadership style of the regional apparatus affects the delegation of authority to the lower levels of the organization, the crisis of trust of the organizational leadership in the abilities of the lower echelons is the main obstacle to the freedom of decision making at the lower levels. This does not happen within the Alor District Government only, but this practice also occurs in several organizations by allocating power only to a few individuals who occupy certain job categories (Harper, 2015).

b. Information Availability

On the focus of the availability of information for the decision-making process in this research, the decision-making process of the regional apparatus of Alor Regency is available either through organizational work units or through external information channels both through print and electronic media in the form of letters, input, suggestions and public criticism on the quality of public services so that all decisions are made based on many considerations and the availability of accurate information. Usually the leader before making a decision asks the opinion of the subordinates in charge of the matter so that the negative impact of the decisions taken can be avoided. The availability of this information, the information needed in making decisions, is obtained from various references in the form of legislation, scientific reference materials and processed data made by the work unit which according to Dwiyanto (2012:223) is directed at creating professional and accountable bureaucratic performance. .

c. Involvement of Subordinates in the Decision-Making Process

In the process of involving subordinates in the decision-making process, it was also found that most regional apparatus leaders always involve their subordinates in the decision-making process in addition to getting input, positive suggestions but also to improve the quality of the decisions taken. In addition, in order to facilitate its implementation and get full support from subordinates according to Willem and Buelens (2009:294-295) that the proportion of jobs or jobs measures the decision-making process whose residents participate in decision-making and the number of areas they participate in. The lower the proportion of jobs or occupations whose residents participate and the fewer decision areas in which they participate, the more centralized the organization is. Even so, it is also known that as a small regional apparatus leadership does not involve subordinates in the decision-making process but only certain employees in the organization. This can happen because members of the bureaucracy lack or do not have the capacity to facilitate government tasks effectively (Farazmand, 2007:97).

d. Control To Achieve Organizational Goals and Objectives

For the organizational control function in its implementation within the Alor Regency Government, the control function is carried out in stages based on the levels of authority, where the strategic policies of the organization remain with the leadership of the regional apparatus. This is in line with the concept of centralization by Mintzberg (1979:77), which states that the structural design parameters are described by the delegation of formal power down the hierarchy of authority. In addition, organizational control is declared effective due to a significant increase in organizational performance and the lack of deviations made by employees both administratively and legally. This is important considering that in organizational control, institutional,

organizational and procedural modifications and improvements are needed in order to increase the responsiveness of the bureaucracy to citizens and business as well as improve efficiency and effectiveness (Fountain, 2007). This definition already includes the idea of working better and cost less from Peters, (2001) as well as structural re-orderings from Goldfinch, SF and Wallis, (2009) and structural reengineering from Omoyefa, (2008) for the sake of the survival of the local organization of Alor Regency which according to Scott (in Thoha, 1996:101) that the conception of the organization was created as a collectivity that is deliberately formed to achieve a certain specific goal which is more or less based on the principle of continuity.

Implications of Restructuring Regional Apparatuses on Regional Expenditures in the Alor Regency Government Environment

Focus on Regional Expenditures in Alor Regency with subfocus on operating expenses, capital expenditure ratios and efficiency ratios to determine regional financial performance is measured using the following formula:

a. Operational Expenditure Analysis on Total Expenditure

$$\text{Operating Expenditure Ratio} = \frac{\text{realization of operating expenses}}{\text{total regional spending}} \times 100\%$$

Table 1: Operational Expenditure On Total Alor District Government Expenditure

Year	Total Operational Expenditure (Rp)	Total Expenditure (Rp)	Operating Expenditure Ratio (%)
2017	629.557.132.655	1.070.497.501.538	58,81
2018	707.286.061.719	1.118.248.684.520	63,25
2019	722.849.191.806	1.126.032.753.442	64,19
2020	671.499.077.083	1.071.437.735.678,78	62,67
Average	682.797.865.816	1.096.554.168.795	62,27

Source: Processed Data of APBD-P 2017 to 2020

Based on the results of the analysis of Operational Expenditure on the Total Expenditure of the Alor Regency above the average operating expenditure of the Alor Regency Government from 2017 to 2020 it was 62.27% where from the average operating expenditure of Rp. 682,797,865,816 compared to the average total regional expenditure of Rp. 1,096,554,168,795. This shows that most of the budget is used for operating expenses, especially for Personnel Expenditures and Expenditures for Goods and Services.

b. Capital Expenditure Analysis on Total Expenditure

$$\text{Capital Expenditure Ratio} = \frac{\text{realization of capital expenditure}}{\text{total regional spending}} \times 100\%$$

Table 2: Capital Expenditure To Total Expenditure

Year	Total Operational Expenditure (Rp)	Total Expenditure (Rp)	Operating Expenditure Ratio (%)
2017	284.737.983.626	1.070.497.501.538	26,60
2018	275.604.688.797	1.118.248.684.520	24,65
2019	227.570.612.259	1.126.032.753.442	20,21
2020	206.221.721.085	1.071.437.735.678,78	19,25
Average	248.533.751.442	1.096.554.168.795	22,66

Source: Processed Data of APBD-P 2017 to 2020

Based on the results of the analysis of capital expenditure on the total expenditure of Alor Regency, it is known that the average capital expenditure used by the Alor Regency Government in 2017-2020 is 22.66%. The average capital expenditure is Rp. 248,533,751,442 while the average total regional expenditure is Rp. 1,096,554,168,795. The capital expenditure ratio fluctuated between 19-26%. Most of the capital expenditures are used for capital expenditures for land, buildings and structures, roads, irrigation and networks.

c. Efficiency Ratio

Expenditure efficiency ratio is a comparison between actual expenditure and budget. This spending efficiency ratio is used to measure the level of budget savings made by the government.

$$\text{Efficiency Ratio} = \frac{\text{realization of regional spending}}{\text{budget}} \times 100\%$$

Table 3: Expenditure Efficiency Ratio

Year	Actual Expenditure (Rp)	Budget (Rp)	Efficiency Ratio (%)	Performance
2017	1.070.497.501.538	1.100.560.814.647	97,27	Less Efficient
2018	1.118.248.684.520	1.190.768.804.206	93,91	Less Efficient
2019	1.126.032.753.442	1.188.028.735.843	94,78	Less Efficient
2020	1.071.437.735.678,	1.108.660.994.915	96,64	Less Efficient
Average	1.096.554.168.795	1.147.004.837.403	95,60	Less Efficient

Source: Processed Data of APBD-P 2017 to 2020

Overall, if you look at the average percentage of regional efficiency ratios from 2017 to 2020, the Alor Regency Government is 95.60%, which means that the government's performance is considered less efficient in spending because the realization is almost 100% of the budget, where the realization of spending is Rp. 1,096,554,168,795 of the budget of 1,147,004,837,403. This means that the Alor Regency Government has not made savings. The smaller the value of this ratio means the more efficient. But not necessarily in this case the Regional Government has a good performance because it could be that the Regional Government makes savings so that the realization of spending is not maximal or it could be because there is an unrealized budget. Regional governments can also make large budgets so that the realization of expenditures does not reach the set budget.

d. Existing Conditions of Regional Apparatus Organizational Structure

The mapping activity of affairs carried out by the Alor Regency Government in 2016 has resulted in scores for each affair. The Ministry of Home Affairs and Related Ministries/Institutions as well as the Provincial Government of East Nusa Tenggara as shown in the following table have validated this value:

Table 4: Mapping Results For Alor Regency Government Affairs, 2016, 2019 And 2021

No	Government Affairs	Score	Applicable Regional Device Typologies
Mandatory Affairs Related to Basic services			
1.	Education	930	A
2.	Health	990	A
3.	Public Works and Spatial Planning	1.164	A
4.	Public Housing and Residential Areas	660	A
5.	Public Peace and Order and Community Protection		
	▪ Civil service police Unit	660	A
	▪ Sub Fire Fighting	780	
6.	Social	1.155	A
Mandatory Affairs Not Related to Basic Services			
7.	Labor	630	Sector Level
8.	Women Empowerment and Child Protection	900	A
9.	Food	1.020	A
10.	Land	585	Sector Level
11.	Environment	1.125	A
12.	Population Administration and Civil Registration	1.140	A
13.	Community and Village Empowerment	1.011	A
14.	Population Control and Family Planning	1.050	A
15.	Transportation (Islands Area)	993	A
16.	Communication and Informatics	846	A
17.	Cooperatives, Small and Medium Enterprises	540	C
18.	Capital investment	720	A
19.	Youth and Sports	480	C
20.	Statistics	480	Section Level
21.	Encoding	352	Sector Level
22.	Culture	750	B
23.	Library	480	Sector Level
24.	Record management	710	Sector Level
Optional Affairs			
25.	Marine and Fisheries	930	A
26.	Tourism	1.230	A
27.	Agriculture	951	B
28.	Forestry	240	Subsector Level
29.	Energy and Mineral Resources	240	Section Level
30.	Trading	810	A
31.	Industry	720	B

32.	Transmigration	939	Sector Level
Supporting and Supporting Elements of Affairs			
33.	The Regional Secretariat	1.275	A
34.	Council Secretariat	640	B
35.	Inspectorate	1.260	A
36.	Planning	1.167	Sector Level
37.	Finance	1.440	A
38.	Employment, Education and Training	870	A
39.	Research and development	1.035	Sector Level
Districts:			
40.	Pearl Bay District	850	A
41.	Northwest Alor District	1.335	A
42.	Southwest Alor District	820	A
43.	South Alor District	820	A
44.	East Alor District	750	A
45.	Pantar District	820	A
46.	West Pantar District	915	A
47.	North Central Alor District	820	A
48.	Northeast Alor District	975	A
49.	Northwest Pantar District	900	A
50.	Central Pantar District	975	A
51.	East Pantar District	820	A
52.	Kabola District	960	A
53.	Mataru District	750	A
54.	Pureman District	795	A
55.	Pura Island District	780	A
56.	Lembur District	840	A
57.	South Abad District	650	A

Source: Alor District Organization Section (2021).

The composition of the Regional Apparatus has been determined based on the Alor Regency Regional Regulation Number 8 of 2016 concerning the Formation and Structure of the Alor Regency Regional Apparatus, as amended by the Alor Regency Regional Regulation Number 4 of 2021 concerning

Amendments to Regional Regulation Number 8 of 2016 concerning the Establishment and Structure of the Regency Regional Apparatus. Alor can be seen in the following table:

Table 5: List of Regional Apparatuses Of Alor Regency 2021

No	Regional Device	Typology	Managed affairs
1.	The Regional Secretariat	A	Support
2.	Secretariat of the Regional People's Representative Council	B	Support
3.	Regional Inspectorate	A	Support
4.	Education Office	A	Education
5.	Culture Office	B	Culture
6.	Tourism Office	A	Tourism
7.	Health Office	A	Health
8.	Transportation Office	A	Transportation
9.	Communication and Informatics Office	A	Communication and informatics, Statistics, Cryptography
10.	Women's Empowerment and Child Protection Office	A	Women's Empowerment and Child Protection
11.	Population Control and Family Planning Office	A	Population Control and Family Planning
12.	Social Office	A	Social
13.	Manpower and Transmigration Office	A	Manpower, Transmigration
14.	Community and Village Empowerment Office	A	Community and Village Empowerment
15.	Trade Office	A	Trade
16.	Industry Office	B	Industry
17.	Marine and Fisheries Office	A	Marine and Fisheries
18.	Citizenship and Civil Registration Office	A	Population Administration

			and Civil Registration
19.	Public Works and Spatial Planning Office	A	Public Works and Spatial Planning and Landscaping Sub-business
20.	Housing, Residential Areas and Land Office	A	Housing, Settlement Areas and Land
21.	One-Stop Integrated Investment and Licensing Services Office	A	One-Stop Integrated Investment and Licensing Services
22.	Civil service police Unit	A	Public Peace and Order as well as Community Protection, Fire sub affairs
23.	Archives and Libraries Office	A	Archives, Libraries
24.	Food Office	A	Food
25.	Agriculture and Farming Office	B	Agriculture, Plantation Sub Affairs
26.	Livestock Office	B	Agriculture Livestock Affairs
27.	Convenience and Sports Office	C	Convenience and Sports
28.	Cooperatives, Small and Medium Enterprises Office	C	Cooperatives, Small and Medium Enterprises
29.	Environmental Office	A	Environment
30.	Planning, Research and Development Agency	A	Planning, Research and Development
31.	Regional Finance and Asset Agency	A	Regional Finance and Assets
32.	Revenue Agency	A	Finance
33.	Staffing and Human Resources Development Agency	A	Employment, Education and Training
34.	National and Political Unity Agency	A	General Administration
35.	Regional Border Management Agency	A	Regional Border Manager
36.	Regional Disaster Management Agency		-
37.	DISTRICTS: Teluk Mutiara, Northwest Alor, Southwest Alor, South Alor, East Alor, Pantar, West Pantar, North Central Alor, Northeast Alor, Northwest Pantar, Middle Pantar, East Pantar, Kabola, Mataru, Pureman, Pura Island, Lembur, Southern Abad	A	Territory

Source: Regional Regulation Number 8 of 2016 as amended by Regional Regulation Number 4 of 2021.

e. Findings of The Main Problems of Regional Apparatus

The organizational arrangement of regional apparatus should ideally be adapted to the characteristics and financial capabilities of the region, so that regional apparatus can support the achievement of regional goals and optimally be able to provide basic services needed by the community. In this context, the arrangement is expected to lead to the formation of an established organization that is able to act as a forum for implementing regional superior affairs, in addition to strengthening the implementation of basic service affairs (article 53 paragraph 3 of Government Regulation 18/2016 concerning Regional Apparatus).

From the foregoing description, it is known that the organizational structure of the regional apparatus, both the organization of affairs and the typology of its magnitude, is in accordance with the provisions of the legislation. However, there are several issues that need attention from the local government, as follows:

1. There are several accommodations of affairs in regional apparatuses that have not yet fully created harmony in achieving regional goals. These include, among other things:
 - a. Agricultural management (in a broad sense) in three separate work units at this time, namely the Agriculture and Plantation Service, the Food Service and the Livestock Service Office, has created an uneven balance of workloads and has not integrated efforts to increase agricultural productivity (especially food crops) with efforts to increase agricultural productivity and food security. A more even arrangement and division of labor is needed so that work productivity efforts and efficient regional budgets in agriculture can be realized more quickly. In this case, food affairs may be combined with agriculture and plantation affairs, while livestock affairs may be combined with fishery affairs;
 - b. The handling of Micro, Small and Medium Enterprises which is currently carried out by the Cooperatives and SMEs Office often overlaps with the handling of Small and Medium Industries carried out by the

Industry Office. This is because operationally, the definition of “Small and Medium Industry” is relatively indistinguishable from “Small and Medium Enterprises”. It is necessary to organize MSME affairs into the same container as industrial affairs.

- c. The handling of environmental affairs has been supported by an ideal structure, but there are several segments of work carried out by other agencies that require a better arrangement of job descriptions. This includes activities related to city parks, where development is carried out by Public Works and Environmental Office carries out Public Housing Office while maintenance. The implementation of Green Open Space Arrangement activities is seen to be unclear about the division of work responsibilities between agencies. Besides the cleaning function carried out by the Environmental Service, on the other hand, the Alor Regency Trade Office found nomenclature for the Cleanliness and Order Market Section. To increase work productivity and efficiency of regional budgets, Environmental Office should carry out these activities and functions.
2. There are affairs that are handled as the same function from several positions, as follows:
 - a. Handling disaster victims, including procurement of logistics and community empowerment, between the P3A Social Service Agency and BPBD;
 - b. The potential for overlapping and unclear work boundaries related to spatial planning between the Public Works and Spatial Planning Agency and the Regional Planning, Research and Development Agency, land between the Housing, Settlement Areas and Land Offices with the District Finance and Assets Agency, Alor Regency.
3. There is misplacement, namely the implementation of activities that are not in accordance with the organizational function, namely the implementation of technical activities in several parts of the Regional Secretariat, while the ideal Secretariat function is the function of coordination, policy formulation and administrative services.
4. There are several problems with the size of the structure that is not suitable, low productivity and inefficiency, namely:
 - a. The organizational structure is great but the results of the work are not visible. The structure of the Department of Trade, the Office of Communication and Information Technology, the Department of Food, the Department of Population Control and Family Planning, the Department of Archives and Libraries, the Department of Marine Affairs and Fisheries of each Type A, the results of their work are not in accordance with the size of the organizational structure.
 - b. The structure has not been fully productive, because it is not supported by an adequate budget, there has even been a structure in the regional apparatus for five years since the institutional regulation was enacted, there is no budget allocated, so the sector does not carry out any activities at all. Such as the field of analysis at the Department of Transportation. In fact, almost all Regional Apparatuses within the Alor Regency Government are not supported by an adequate budget to support the implementation of their respective government affairs functions. This is inefficiency in the size of the structure compared to the implementation of its functions.

f. Alternative For Regional Apparatus Arrangement In The Context Of Regional Expenditure Efficiency

Based on the findings of the problems as described previously, in the context of efficient policy spending on regional institutional arrangements in Alor Regency, several alternatives can be directed, as follows:

1. Reorganization of government affairs in order to create efficiency in regional spending, namely:
 - a. Combining food affairs with agricultural affairs and plantation sub-affairs (except for livestock sub-affairs);
 - b. Combining fisheries affairs with the livestock sector
 - c. Combining SME Cooperative affairs, Industry affairs with Trade affairs
 - d. Combining Social affairs, with labor and transmigration affairs
 - e. Combining the affairs of Women's Empowerment and Child Protection with Population Control and Family Planning
 - f. Combining the affairs of Transportation with the affairs of Communication and informatics

- g. Combining education affairs with cultural affairs, youth affairs and sports
 - h. Combining the Regional Revenue Agency with the same Regional Finance and Asset Agency handling financial affairs
2. Changing inefficient and less productive structures.

After the alignment, it is necessary to make changes to the structure of several regional apparatus in order to budget efficiency and increase the work productivity of regional apparatus as follows:

- a. Streamlining the Department of Public Works and Spatial Planning
 - b. Streamlining the Department of Housing, Settlement and Land Affairs
 - c. Streamlining the Civil Service Police Unit
 - d. Streamlining the Office of Archives and Libraries
3. Improvement of job descriptions so that they do not overlap, especially between:
- a. Social Rehabilitation Sector Social Service with BPBD
 - b. Spatial Planning and Utilization Section at the PUPR Service with the Sub-Sector of Spatial Planning and Land at Bappelitbang
 - c. Data Collection and Land Utilization Section at the Department of Housing, Settlement and Land Affairs with the Asset Administration Sub-Sector at the Regional Finance and Assets Agency.

The three alternatives are carried out with reference to regulations regarding the collection of government affairs and technical arrangements for other regional apparatuses regulated in Government Regulation 18/2016 concerning Regional Apparatuses and Minister of Home Affairs Regulation 99/2018 concerning Guidance and Control of Regional Apparatus Arrangements.

CONCLUSION

Based on the results of research and discussion in the previous chapter, the following conclusions can be drawn:

1. The organizational restructuring of the regional apparatus carried out by the Alor Regency Government was analyzed using the opinion of Robbins (1994:6), namely; (1) complexity consisting of; (a) horizontal differentiation found that the number of employees in each work unit or regional apparatus within the scope of the Alor Regency Government was not yet ideal in supporting the implementation of the duties and functions of regional apparatus in addition to the implementation of Government Regulation no. 18 of 2016 has an impact on increasing the number of affairs and shifting affairs in certain regional apparatus organizations and not being supported by an adequate budget, (b) vertical differentiation it is found that the current level of structure is ideal where the hierarchical level is owned with three echelon levels (II, III). and IV). It is even shorter than the echelon level of regional apparatus based on Government Regulation Number 41 of 2007 where it is still known as echelon V, while in (c) spatial differentiation it is found that structural changes have become a problem of coordination, namely the distance between one work unit and another. (2) the formalization is known that in the process; (a) the selection process until the recruitment of new employees within the Alor Regency government has been effective, (b) the competency/skill requirements are carried out by giving the staff the freedom to be creative and innovate so that staff can work comfortably without any pressure (c) job descriptions found that the main tasks and functions have been distributed, but there are still employees who do not understand their respective job descriptions (d) overlapping (overlapping) it was found that there are several Regional Apparatus Organizations experiencing overlapping main tasks and functions (e) regulations it was found that there are still employees who do not understand well the applicable regulations to support the implementation of the main tasks and organizational functions (f) procedures and management mechanisms, it is found that many Alor Regency Apparatus Organizations have not developed standardized SOPs in the form of Decrees of each Regional Apparatus Leader and (g) policy What will be taken by the leadership of the regional apparatus within the scope of the Alor Regency Government is in line with the achievement of organizational goals and objectives (h) policy implementation is hampered by limited resources such as budget, human resources and supporting infrastructure (i) training it is found that the average Civil Apparatus The state within the Alor Regency Government has not received managerial training or technical training to improve employee competence and (3) centralization is found that in terms of; (a) decision making found that each level of the organizational hierarchy is given full authority to make decisions according to their duties and functions,

then (b) availability of information, (c) involvement of subordinates in the decision-making process, (d) control that remains in the authority regional head.

2. The implications of restructuring the regional apparatus on regional expenditures within the Alor Regency Government are found that; (1) there are several accommodations for affairs in regional apparatus that have not fully created harmony in achieving the regional vision and mission, (2) there are affairs that are managed as the same function from several positions, (3) there is a misplacement, namely the implementation of activities that are not in accordance with the functions organization, namely the implementation of technical activities in several parts of the Regional Secretariat, while the ideal function of the Secretariat is to coordinate, formulate policies and administrative services and (4) there are several problems with the size of the structure that is not suitable, low productivity and inefficiency.

Based on the Conclusions Above, Some Suggestions are given As Follows:

1. The organizational restructuring of regional apparatus is also a very appropriate momentum to answer the demands of reform and internal problems within the bureaucracy, so that if this is not done immediately, the community will not get much benefit from regional autonomy in the form of public services significantly. Therefore, to increase the success of bureaucratic restructuring in Alor Regency, it is necessary to increase the dimensions of complexity by redesigning the organization because the restructuring carried out has had an impact on increasing the number of affairs and shifting affairs in certain regional apparatus organizations, the need for adequate budget support and coordination that needs to be strengthened, while in the formalization dimension it is necessary to readjust or reposition the duties and functions of the Regional Apparatus Organizations so that they do not overlap (overlapping) because there are still some Regional Apparatus Organizations and employees who experience overlapping in the implementation of their main tasks and functions. the existence of SOPs for Regional Apparatus Organizations so that all planning procedures can be controlled and the need for managerial and technical training to improve employee competence.
2. The organizational restructuring of the regional apparatus must take into account and pay attention to the potential and capabilities of the region that have an impact on aspects of financing, personnel and equipment as a whole and comprehensively concerning regional apparatus, so it is recommended that the Alor Regency Government carry out reorganization of government affairs in order to create efficiency in regional spending, after being carried out For alignment, it is necessary to make changes to the structure of several regional apparatuses in order to budget efficiency and increase the work productivity of regional apparatus, then to improve job descriptions so that there is no overlap.

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**GOOD GOVERNANCE ANALYSIS IN VILLAGE FUND MANAGEMENT IN OEFAFI VILLAGE,
EAST KUPANG DISTRICT, KUPANG REGENCY**

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ABSTRACT

Village fund management is inseparable from the principles of good governance, namely Partition, legal certainty, transparency, responsibility, agreement-oriented, fairness, effectiveness, efficiency and responsiveness. In the management and villages in the oefafi Village of East Kupang District, there are three principles of management based on good governance that have not been implemented properly, namely effectiveness, efficiency and responsiveness. Based on research, it is known that efficiency is a way to achieve optimal goals (quickly and precisely) and according to desire by combining the resources expended, the resources included in this efficiency are energy, money, and time. In the management of village funds in Oefafi Village, East Kupang District, Kupang Regency, the achievement of goals by minimizing available resources has not been carried out to the maximum while in terms of effectiveness is the process of achieving planned goals in accordance with the availability of budgeted costs, set time, and the number of personnel specified. In the management of village funds in Oefafi Village, East Kupang District, effectiveness has not been running optimally because the process of achieving goals is still constrained not according to the time specified according to planning while in terms of responsiveness itself is the ability to recognize needs, compile agendas and priorities, develop programs according to the needs and aspirations of the community. The response of the village government in Oefafi Village, East Kupang District, Kupang Regency is still less than the maximum because it does not know the needs of the community so that the development of the program is not in accordance with the needs of the community.

Keywords: Management, Village and Finance.

1. INTRODUCTION

Desa is a unitary legal society that has territorial boundaries that are authorized to regulate and take care of government affairs, the interests of local communities based on community initiatives, origin rights, and or traditional rights that are recognized and respected in the government system of the Unitary State of the Republic of Indonesia (Law No. 6 of 2014 on Villages). The Law on Villages strengthens the authority of villages to organize government, carry out development, and foster and empower village communities (Indrawati, 2017). In order to support the implementation of village duties and functions in the implementation of government and village development in all aspects in accordance with their authority, Law No. 6 of 2014 on Villages gives a mandate to the Government to allocate Village Funds..

Village funds make village income increase so that it needs to be regulated and managed properly in the management of village finances. The principle of village financial management in The Minister of Home Affairs Regulation No. 113 of 2014 concerning Village Financial Management is transparent, accountable, participational and carried out in an orderly and budget disciplined manner. The process of managing village funds must be based on the principles of transparency, accountability and participatory. In the management of village funds, there is a demand for an aspect of good governance where one is accountability. Village heads and other village officials must be transparent and responsible in managing village finances ranging from planning, implementation, management, reporting and accountability. The principle of accountability must be applied by the village government in its governance, where all end activities can be accounted for to the village community in accordance with the applicable provisions (BPKP, Juklak Bimkon Village Financial Management, 2015). So that an understanding of the financial management of village funds is needed as a medium for transparency and delivery of accountability for the use and implementation of activities funded by village funds (Kurnia, Sebrina, 2019).

In Law No. 6 of 2014 concerning Villages, it is explained that village financial management follows the pattern of regional financial management (regency / city / province) consisting of income, expenditure and financing stipulated in apbdesa. The responsibility is conveyed to the Regent by the village head. The allocation of village funds (ADD) is one of the sources of village income (sequence number 4), which is received gradually in each year. This ADD is the allocation of village funds, namely the financial budget given by the government to the village. The source of this ADD comes from the distribution of local tax revenues as well as central and regional financial balance funds received by the district. In accordance with the Minister of Home Affairs Regulation no.37 of 2007 concerning Guidelines for Village Financial Management in article 18, it is explained

that the allocation of village funds comes from district / city APBD sourced from central and regional financial balance funds received by the Regency / City Government for villages of at least 10% (ten percent).

According to the Ministry of Finance (2015) the provision of ADD aims to "improve the welfare and equitable development of villages through improving public services in villages, advancing the village economy, overcoming development gaps between villages and strengthening village communities as the subject of development. ADD is intended for indigenous villages and villages that are transferred through district / city APBD and used to finance the implementation of village government, development in the village, empowerment of village communities, village community activities.

In 2015 in Kupang Regency the central government allocated funds to 160 villages in Kupang regency. The village funds are allocated to each village to be used to improve the welfare and equalization of village development through improving public services in the village, advancing the village economy, overcoming development gaps between villages and strengthening village communities as the subject of development. In 2015-2018 village funds were allocated two stages, the first stage 60% with the amount and the second stage 40% but with many problems in accountability so that the government allocated funds in 2019-2020 into three stages, namely the first stage 40%, stage two 40% and stage three 20% with details of stage one in March, phase two in August, and stage three in November. The allocation of village funds every year continues to increase based on the increase in population in each village in Kupang regency.

The village funds received by Oefafi Village on are as follows:

Table 1: Village Budget 2015-2018

No	Year	Budget Amount
1	2015	320.311.375
2	2016	615.900.000
3	2017	774.327.000
4	2018	710.327.000
5	2019	805.604.000
	2020	820.604.00

Source: APBDES Oefafi Village (2021)

For the realization of clean good village fund management, it is necessary to apply the concept of good governance (good governance) in real terms. Good government governance is good governance that has been introduced by the Indonesian government. According to the National Committee on Governance Policy, the government in Indonesia has a responsibility in implementing good government governance standards that have been implemented by international standards (Sutedi, 2011: 3).

The application of the principle of good governance in village financial management must be implemented by village officials together with the community. The government that is not transparent will prevent the community from participating in the financial management of the village. Accountability and transparency must certainly be really implemented and get serious attention from all stakeholders in the village, both the government and the community and non-governmental organizations in the village to achieve village independence. This is confirmed by the Regulation of the Minister of Home Affairs Number 20 of 2018 concerning Village Financial Management in which there is a principle of financial management that village finance is managed based on the principles of transparency, accountability, participatory and carried out in an orderly and budget disciplined manner.

The principles in village financial management are a manifestation of one's obligation to account for the management and control of resources and the implementation of policies entrusted to him in order to achieve the goals that have been set. In the management of village finances as stipulated in the Regulation of the Minister of Home Affairs Number 20 of 2018 concerning Village Financial Management states that the Village Head has the responsibility to report the realization of the village budget to the Regent. In addition, the Village Head is also responsible for controlling village devices in realizing the APBDesa budget that has been planned by the Treasurer, Village Secretary and Section Head is also responsible to the village head for village financial management.

In the management of village funds can not be separated from the principles of good governance, namely Participation, legal certainty, transparency, responsibility, agreement-oriented, fairness, effectiveness, efficiency and responsiveness. In the management and villages in the oefafi Village of East Kupang District, there are three principles of management based on good governance that have not been implemented properly, namely

effectiveness, efficiency and responsiveness. Effectiveness which has not achieved the goals according to the needs of the people of Oefafi Village, and does not co-opt the available resources, effectiveness has not achieved the goals according to the agreed planning, and provides results that benefit the community optimally, the reliability has not met the needs of the community properly, and services to the community. This is strengthened by the results of observation or preliminary data collection of the author's findings that the report on the financial responsibility of village fund management in Oefafi Village, East Kupang District, Kupang Regency often experiences delays.

To realize good governance in village financial management, based on previous theories and researchers attached to previous research that examines the principles of fund management governance in terms of transparency, accountability, and participation. Based on the above study, the author wants to see the application of the principle of good governance of village fund management in the oefafi Village of East Kupang District of Kupang Regency with a review of the principle of good governance with the fulfillment of the principles of effectiveness, efficiency, responsiveness in village financial management.

Based on the above description, the author is interested in conducting research by raising the title "Good Governance Analysis in Fund Management in Oefafi Village, East Kupang District".

2. LITERATUR REVIEW

2.1 Good Governance Desa

Governance is growing in popularity as government. However, the meaning of government is not only as an activity but in it there is a meaning of management, management, direction, and development in the implementation. While the best practice is called or good governance of good government (Sedarmayanti, 2012: 3). Syakrani (2009: 122) also explained that governance is a neutral concept, which can format a healthy model (good), so that the term good governance appears. So that governance can be said to be an effort from the government in organizing a good government in accordance with the applicable provisions and rules. Governance practices in the implementation of the best government can be called good governance. Governance demands a redefinition of the role of the state, and that means a redefinition of the role of citizens. There are greater demands on citizens, among others, to monitor the accountability of the government itself (Sumarto, 2003: 2) while Rewansyah (2010: 80) states that "Governance refers to the process, namely the process of organizing government in a country by involving not only the state, but also all existing stakeholders, be it the business world / business and civil society(civil society)."

Ganie-Rochman (Widodo, 2001: 18) the concept of governance involves not only government and state, but also the role of various actors outside the government and state, so the parties involved are also very broad. Governance is a mechanism for managing economic and social resources that involves the influence of state sectors and non-governmental sectors in a collective activity. While in Osborne and Geabler, (1992) Pinto dalam Nisjar (1997: 119) good governance has criteria that are able to spur competition, accountability, responsiveness to change, transparent, adhering to the rule of law, encouraging the participation of service users, attaching importance to quality, effective and efficient, considering the sense of justice for all service users, and building an orientation to values.

There are three main principles of good governance that underlie regional financial management (Mardiasmo, 2002: 105) First, efficiency means that the use of community funds can produce maximum output (effectiveness). Second, effectiveness means that the use of the budget must achieve targets or objectives of public interest. Third, responsiveness is one measure of the success or failure of the performance of public institutions.

To analyze the extent of the implementation of Good Governance in Fund Management in Oefafi Village, East Kupang District, the author used the criteria for measuring capacity by Mardiasmo (2002: 105) which is intended as a demonstrated effort to develop a strategy to improve the efficiency, effectiveness, and responsiveness of government performance. Efficiency here in terms of time and resources needed to achieve the outcome, effectiveness in the form of the speed of business carried out for the desired result and responsiveness how to adjust between needs and abilities for that purpose. The author relates the analysis of good governance of regional financial management by Mardiasmo (2002;10) with the management of village funds in oefafi Village implemented by the oefafi Village government which will be explained as follows:

1. Efficiency

The objectives and objectives of village fund management by the village government must be clear and measurable, so that interpretations that can cause conflicts in the atntara implementation agency or ignorance in

the implementation by implementation agents. The purpose of village fund management is needed to direct in carrying out village fund management, it is done in accordance with what has been planned or targets that have been set.

2. Effectiveness

In the implementation of village fund management by avoiding things outside planning to reduce problems in Oefafi Village. The implementation of the program must be transformed directly to the community appropriately to address the problems and needs of the community in Oefafi Village so that the village fund management program is declared effective.

3. Government Performance Response

The end result of achieving the goals of planning in the management of village funds in oefafi Village is pressing on meeting community needs and information on village fund management in a transparent manner.

2.2 Village

General definition is the understanding that is widely used by society in general about the nature or about the definition of a particular object discussed. In general, the village is interpreted by the community as a place to live a group of residents characterized by the use of grammar with a thick regional accent, relatively low education level, and generally the people have livelihoods in the agrarian or marine fields. In the General Dictionary Indonesian mentioned village are (1) the territory inhabited by a number of families who have their own system of government (headed by the Village Head), (2) a group of houses outside the city which is a unit of kampong, hamlet, (3) udik or hamlet (in the sense of inland areas or opponents of the city), (4) places, land, regions (Poerwadarminta, 2007: 286).

Villages based on the provisions of Article 1 number 1 of Law No. 6 of 2014 concerning Villages are defined as customary villages and villages or so-called by other names, hereinafter referred to as villages, are units of legal communities that have territorial boundaries authorized to regulate and manage government affairs, the interests of local communities based on community initiatives, origin rights, and/or traditional rights that are recognized and respected in the government system of the Unitary State of the Republic. Indonesian.

Kartohadikoesoemo (1984: 280) states that the village is a legal unity in which a ruling society resides and the community has its own government. While the definition of a village according to Ndraha (1981: 33) is the lowest unity of government organization, has a certain territorial boundary, directly under the sub-district, and is a unitary legal community that has the right to organize its household..

Handono (2005: 132) states that villages are always associated with two main images, namely: (1) sociological villages are seen as communities in certain geographical unity that between them know each other well with relatively homogeneous lifestyles of life and many directly dependent on nature, so that the people are still largely dependent on nature, and (2) villages are often identified with the organization of power. Through these lens, the village is understood as an organization of power that politically has a certain authority in the structure of the State government. The village is one of the autonomous regions that is at the lowest level of the regional autonomy hierarchy in Indonesia, as stated by Nurcholis that, "the village is the lowest unit of government". One form of village government affairs that is the authority of the village is the management of village finances. Village finance is all village rights and obligations that can be assessed by money, as well as everything in the form of money or in the form of goods that can be used as village property in connection with the implementation of rights and obligations (Hanif, 2011: 81).

Sukriono (2008: 1) expressed his opinion that the lowest government unit in The State of Indonesia is a village. The concept of the village as a social entity is very diverse, which is in accordance with the purpose and point of view to be used in seeing the village. The term village can be a concept without political meaning, but it can also mean a political position and at the same time the quality of the position faced by other parties or forces.

According to Government Regulation No. 43 of 2014 concerning The Implementation Regulation of Law No. 6 of 2014 concerning Villages, village government consists of village governments and village consultative bodies. The village government consists of the village chief and the village apparatus. The village head has the task of organizing government, development, and community affairs.

2.3 Village Fund

Based on Law No. 6 of 2016 concerning villages, villages are given the authority to regulate and manage their authority according to needs. This means that village funds will be used to fund the entire village authority in accordance with the needs and priorities of the village fund. Village funds are funds sourced from the state revenue and expenditure budgets intended for villages that are transferred through district / city revenue and

expenditure budgets and are used to finance government administration, development implementation, community development and community empowerment. The government budgets village funds nationally in the state budget annually sourced from government spending by streamlining village-based programs evenly and equitably (Saibani, 20145: 4).

In the Regulation, the Minister has also been regulated that village funds are prioritized to finance the implementation of local-scale village programs and activities in the field of village development and village community empowerment. The priority of using village funds is based on principles: first, justice by prioritizing the rights or interests of all villagers without discriminating, secondly, priority needs, by prioritizing village interests that are more urgent, more needed and directly related to the interests of most villagers (Indrawati, 2017: 4).

In order to realize the orderly, transparent and quality management of village funds, the Government and districts / cities are authorized to be able to sanction the delay in the distribution of village funds in the event of reports on the use of village funds that are late / not submitted. In addition, the government and districts / cities can also provide sanctions in the form of reduction of village funds, if the use of these funds is not in accordance with the priority of using village funds, general guidelines, technical guidelines for activities or the storage of money in the form of deposits of more than 2 (two) months. The budget allocation for village funds is set at 10% (ten tenths).

The Purpose of the Village Fund is based on Law No. 6 of 2014 Concerning Inner Villages (Indrawati, 2017: 4):

1. Improving public services in the village.
2. Alleviating poverty.
3. Advancing the village economy.
4. Addressing the development gap between villages.
5. Strengthening rural communities as the subject of construction.

Allocating of internal village funds (Indrawati, 2017: 17) includes:

1. Each district/city's village funds are allocated based on the multiplication between the number of villages in each district/city and the average village funds per province.
2. The average Village Fund of each province is allocated based on the number of villages in the province concerned as well as the number of district / city residents, area, poverty rate, and level of geographical difficulty of districts / cities.
3. The number of inhabitants, area, and poverty rate are calculated by weight: 30% for the population, 20% for the area, and 50% for the poverty rate.

3. RESEARCH METHODS

The method used in this study is a qualitative research method that will be carried out in Oefafi Village, Kupang District, east of Kupang Regency. The informants numbered 12 people with the following details:

Table 2: Research Informants

No	Infoman	Total
1	Village head	1
2	Chairman of the Village Consultative Board	1
3	Village Secretary	1
4	Village Treasurer	1
5	Village Companion	1
6	Head of Activity Implementation Team	1
7	Head of Hamlet	3
8	Villagers	6
	Total	12

The types of data in this study are Qualitative Data and Quantitative Data while The data sources in this study come from primary data sources and secondary data while the data collection methods in this study are Field Research, Literature (Library Research) while data collection techniques in this study are Observations, Qualitative Interviews and Qualitative Documents.

In analyzing the data, the data obtained by researchers using data analysis techniques put forward by Bungin (2012: 70), namely as follows:

1. Data Collection

Data collection is an integral part of data analysis activities. Data collection activities in this study are by using interviews and documentation studies.

2. Data Reduction

Data reduction, interpreted as the selection process, focuses attention on simplification and transformation of abusive data that arises from written records in the field. Reduction is done since data collection begins with making summaries, coding, searching themes, creating clusters, writing memos and so on with the intention of setting aside irrelevant data / information.

3. Data Display

Data display is the description of a set of composed information that provides the possibility of drawing conclusions and taking action. The presentation of qualitative data is presented in the form of narrative text. The presentation can also take the form of matrixes, diagrams, tables and charts.

4. Conclusion Drawing and Verification

Conclusion Drawing and Verification is the final activity of data analysis. Draw conclusions in the form of interpretation activities, namely finding the meaning of the data that has been presented.

4. RESEARCH AND DISCUSSION RESULTS

4.1 Good Governance in Village Fund Management in Oefafi Village, East Kupang District, Kupang Regency

To analyze the extent of the implementation of Good Governance in Fund Management in Oefafi Village, East Kupang District, the author used the criteria for measuring capacity by Mardiasmo (2002: 105) which is intended as a demonstrated effort to develop a strategy to improve the efficiency, effectiveness, and responsiveness of government performance. Efficiency here in terms of time and resources needed to achieve the outcome, effectiveness in the form of the speed of business carried out for the desired result and responsiveness how to adjust between needs and abilities for that purpose. The author relates the analysis of good governance of regional financial management by Mardiasmo (2002;10) with the management of village funds in oefafi Village implemented by the oefafi Village government which will be explained as follows:

4.1.1 Efficiency

The objectives and objectives of village fund management by the village government must be clear and measurable, so that interpretations that can cause conflicts in the atntara implementation agency or ignorance in the implementation by implemnation agents. The purpose of village fund management is needed to direct in carrying out the management of village funds, it is done in accordance with what has been planned or targets that have been set.

In the management of village funds, there are several terms that are put forward to achieve good management implementation, one of which is efficiency. Daily life efficiency sentences are often heard and in the world of work, broadly speaking efficiency explains how to achieve an optimal goal (fast and precise) and as desired, by minimizing the resources expended (The resources in question are energy, money, and time). According to Ghiselli & Brown (1955: 251) the term efficiency has a definite understanding, which shows a comparison between output and input. According to Mahmudi (2007;14) efficiency contains the term Efficiency in (private sector efficiency), efficiency in the private business sector is explained by the concept of input output, namely input ratio and output ratio. Efficiency in the community service sector is an activity carried out with minimal sacrifice or in other words an activity has been carried out efficiently if the implementation of the work has reached the target with the lowest cost or at the minimum cost obtained the desired result. The efficiency of organizing local government is achieved by paying attention to aspects of relations and work procedures between local government agencies by utilizing the potential and diversity of a region.

In the implementation of an efficiency program there is a major benchmark that must be underlined as the main starting point that must be achieved first with the criteria that must be addressed or said the principles of efficiency. Village funds are funds sourced from the State Revenue and Expenditure Budget intended for Indigenous Villages and Villages that are transferred through the District / City Regional Revenue and Expenditure Budget and used to finance government, development, and community empowerment, and community empowerment. The village fund budget in Oefafi Village, East Kupang District, Kupang Regency in 2021, is described in five items, namely the first village's original income from transfer revenues of Rp

1,341,855,870.00 and other legitimate incomes of Rp 0.00 total income amounting to Rp 1,341,855,870.00. Both village expenditures, the field of village government organizers Rp 392,120,187.00, the field of village development implementation 293,518,553.00, the field of village community development Rp 6,749,815.00, the field of village community empowerment Rp 31. 144,054.00, and the field of disaster management, emergency and urgent Rp 647,478,320.00 the amount of spending amounted to Rp 1,371,010,929.00. The three village financing, receiving financing amounted to Rp 29,155,059.00 financing of Rp 0.00.

In Mardiasmo (2002: 105) there are two objectives in efficiency as follows:

A. Achieving Goals as Needed

Achieving goals as needed is the most important part of planning. In carrying out a program the core activity of the walk is to achieve the goal. Achieving the goals as needed means answering with certainty every community complaint, the same thing as the management of village funds which amounts to almost 1 billion. In the management of village funds, the village community generally hopes that it can answer all the needs in the community.

The needs of the community in one village are generally diverse, these needs should be conveyed to the village government. The delivery of community aspirations can be conveyed if in the meeting the community budget plan is invited to provide the needs in the residential environment. The need will vary because the community knows that a large amount of village funds is able to answer every proposed need. In the delivery of aspirations for the needs of the village community is based on the existence of RPJMDes, RKP, RKA, and then poured in apbdes based on prioritized proposals.

In the management of village funds is a stage to achieve the goal of having long-term and sustainable goals. Long-term and sustainable goals with rpjmdes references in the village. However, this is different from the one in Oefafi Village, East Kupang District, where there has been no RPJMDES since 2015-2021. In achieving goals as needed must be based on planning to be implemented in APBDES.

The needs of the community in one village are generally diverse, these needs should be conveyed to the village government. The delivery of community aspirations can be conveyed if in the meeting the community budget plan is invited to provide the needs in the residential environment. The need will vary because the community knows that a large amount of village funds is able to answer every proposed need. In the delivery of aspirations for the needs of the village community is based on the existence of RPJMDes, RKP, RKA, and then poured in apbdes based on prioritized proposals.

Based on the results of the author's observations and interviews with 2 parties in the Oefafi Village government of East Kupang District, Kupang Regency, there are several findings that for the achievement of goals according to the needs of the community have not been carried out properly because at the time of planning proposals from the community at the time of MUSREMBANGDES not all intestines were prioritized and input in apbdes. To achieve goals as needed is the fulfillment of the needs needed by the community and providing welfare for the community.

Explanation above the many proposed needs of the community, but prioritized some of the main needs items needed by the community that are prioritized through planning and poured in APBDES. Not stopped until then, in the planning process there are various guts or community inputs that are not prioritized to be poured in apbdes seen in the provision of input or proposals, many of the needs that exist in the community environment can be optimized properly to support the welfare of the community.

B. Optimizing Wasted Resources

The number of resources proposed to be fulfilled but prioritized some of the main needs items needed by the community are prioritized through planning and poured in APBDES. Not stopped until then, in the planning process there are various guts or community inputs that are not prioritized to be poured in apbdes seen in the provision of input or proposals the resources that exist in the community environment can be said mubasir because it is not supported properly with the village funds. In achieving goals as needed and optimizing resources are not wasted in the way that every plan must be well grouped so that it can answer and achieve goals to prosper the community in need.

Based on the results of interviews and observations of researchers in Oefafi Village, East Kupang District, Kupang Regency, there are many natural resources that can support the economic opinions of the village community. One of them is the availability of spring water resources that exist at all points where people live, but cannot be utilized properly due to lack or unavailability of adequate human resources. The availability of natural resources in the community environment is well managed efficiently and sustainably with the aim of

remaining utilized by the community. Please note that in management and utilization it is necessary to be sustainable to remain maintained.

Optimizing resources is not wasted, be it natural resources or human resources need to be known in advance to optimize or optimize in general. Optimization is a measure of achieving goals. In the Great Dictionary Indonesian optimization comes from the optimal word which means best, highest. Winardi (1996: 363) optimization is the measure that causes the goal. In Machfud Sidik (2001: 8) there are several indicators in optimizing the goal map, which can take the form of maximization or minimization. Maximize is used if optimization purposes relate to profit, acceptance, and the like. Minimization will be selected if the optimization objectives relate to cost, time, distance, and the like. Goal setting should pay attention to what is minimized or maximized. Both alternative decisions, decision making is faced with several choices to achieve the goals set. Alternative decisions available are certainly alternatives that use limited resources owned by decision makers, alternative decisions are activities or activities carried out to achieve goals. The three resources that are limited, resources are sacrifices that must be made to achieve the goals set. Limited resource availability. Engagement can lead to an optimization process for the implementers. In the optimization of resources available in Oefafi Village, East Kupang District, Kupang Regency optimizing has not been carried out properly with the available resources, the availability of these resources cannot be developed for the achievement of community goals both in fulfilling daily needs and in an effort to increase the economic income of the village community. From some of the indicators mentioned above, the optimization of resources in Oefafi Village, East Kupang District, Kupang Regency is still less than optimal.

4.1.2 Efektivitas

In the implementation of village fund management by avoiding things outside planning to reduce problems in Oefafi Village. The implementation of the program must be transformed directly to the community appropriately to address the problems and needs of the community in Oefafi Village so that the village fund management program is declared effective. Effectiveness is related to the degree of success of an operation in the public sector so that an activity is said to be effective if the activity has a major influence on the ability to provide community services which is a target that has been determined by Beni (2016: 69).

In Mardiasmo (2002: 105), the objectives in effectiveness are as follows:

A. Achieving Goals According to Planning

In achieving goals, there needs to be goals, both long-term goals and short-term goals, these two goals become motivated to achieve the goals that are intended. Not much different from the efficiency of achieving goals as needed, while the effectiveness itself to achieve goals according to planning. In the management of village funds in Oefafi Village, East Kupang District, Kupang Regency, in the management of village funds there is a long-term goal known as RPJMDES. The term is contained in various planning proposals from the community that are long-term, all planning proposals will be poured in the RPJMDES and the implementation of planning must be based on the RPJMDES reference. However, this is different from those in Oefafi Village, East Kupang District, Kupang Regency, which has no RPJMDES, it becomes an obstacle to achieving goals according to the agreed planning.

Based on the explanation of the village secretary and village companion, it can be explained that there is no positive change from there is a definitive village head in Oefafi Village, East Kupang District, Kupang Regency, because in determining long-term goals in the term of office of the definitive village head there is no change in RPJMDES. In the RPJMDES itself, there are various proposals for community planning that need to be answered or need to be achieved as long as the definitive village head is in office, briefly explained rpjmdes is the performance of the village head during the leadership period in the village.

This is evidenced by the absence of long-term goals or RPJMDES, so that it becomes an obstacle in achieving goals according to the planning proposed by the local community. It is concluded that the achievement of goals based on planning must be based on the process, starting from the planning grouping and followed up based on goals both long-term goals and short-term goals to meet every goal that is maximized in the process.

B. Provide Useful Results

In building a plan with the aim of obtaining useful results or have a positive impact on the environment or organization. Results are efforts and hard work that is supported by resources, both natural resources and available human resources. In the context of this discussion related to the management of village funds in Oefafi Village, East Kupang District, Kupang Regency, in the management of village funds that have reached nearly 1 billion whether it has provided useful results for the community, this result is closely related to the planning or proposal of the community in oefafi Village, East Kupang District, Kupang Regency. But not based on the

planning proposal, it will have an impact on the results of the plan itself, on the utilization based on the results of elevation for the facilities and road prasara in hamlet 1 Orfafi Village, East Kupang District, Kupang Regency, there are 115 heads of families who use the road, while for springs if developed as well as 115 heads of families who use and in hamlet 1, while in hamlet 3 if the spring is developed more utilization because the number of family heads in hamlet 3 amounts to 632 heads of families coupled with neighboring villages that use the spring for development in agriculture. Thus in every planning must continue to connect until the final result.

Based on the results of interviews and observations of authors in Oefafi Kecamatan Kupang Timur Kabuapten Kupang Village in the management of village funds to provide useful results have not been carried out optimally. This is based on the explanation from the community that there is village funds for empowerment, the purpose of providing livestock to empower existing village communities but this is contrary to what happened in Oefafi Village, East Kupang District, Kupang Regency where local people do not take advantage of opportunities in being empowered with the village to become something useful in life. By not utilizing these benefits by itself will have an impact on the results or achievement of goals. Judging from the achievement of the results in Oefafi Village, East Kupang District, Kupang Regency, the achievement of the results has not been maximally well with the village fund budget.

4.1.3 Government Performance Response

The end result of achieving the goals of planning in the management of village funds in oefafi Village is pressing on meeting community needs and information on village fund management in a transparent manner.

It can be said that this responsiveness measures the responsiveness of the provider to the hopes, desires and aspirations and demands of customers (Ratminto & Atik Septi Winarsih, 2005: 180-181). Meanwhile, according to Fitzsimmons in Sedarmayanti (2004: 90), one of the dimensions to determine the quality of service is responsiveness or responsiveness. Bureaucracy must respond quickly so as not to be left behind in carrying out its duties and functions (Sugandi, 2011: 124). Responsiveness is included as one of the indicators of employee performance responsiveness directly describes the ability of public organizations in carrying out their missions and goals, especially to meet the needs of the community (Tangkilisan, 2005: 177).

The responsiveness of government performance according to Mardiasmo (2002: 105) is as follows:

A. Memenuhi Kebutuhan Masyarakat

In meeting the needs of the village community is the main goal in community service, the needs of the community are an issue that should the village government respond with various efforts. Seacra outlines a need that can be defined as the human need to sustain its survival scientifically through the achievement of well-being. Needs can be distinguished by their level of importance, time, nature and subject. Fulfillment of needs can be in the form of goods, services of something tangible or intangible. Each individual has different needs influenced by the locality. Keep in mind that one of the traits of need is unlimited, increasing, and ever-changing. In the excavation of researchers there are so many needs of the Oefafi community that have not been met, including irrigation canals, dams, farm roads, deker making, clean water facilities, public cemeteries, opening hamlet connecting roads, and so on. This is a question that needs to be studied to answer the community.

Based on the results of interviews and observations of the author of meeting the needs of the village community in Oeffai Village, East Kupang District, Kupang kabuapten kabuapten Kupang has not been carried out optimally because it is constrained that there is no long-term plan for meeting needs periodically. With various types of community needs proposed, it must be based on the priority scale if the intestine reaches the priority size scale, it will also be carried out to meet these needs.

B. Providing a Good Administrative System

The administrative system is generally known as the maintenance of power by utilizing all abilities with all and every power to carry out government tasks and achieve goals. This also applies in the administrative system in rural areas, a good system of adaministration means service to the community with the availability of funds and power or the ability to carry out government duties and functions to achieve maximum service goals. A good administrative system at the village level that is known is the fulfillment of community needs in correspondence.

The results of the above interview explain about a good administrative system at the village level, especially in Oefafi Village, East Kupang District, Kupang Regency, but it is necessary to know in advance administarsi is generally a service with groups or individuals about the fulfillment of correspondence needs supported by the available budget Nigro and Nigro (1977: 18) administration is a cooperative group effort that is interspersed in

one public environment, and in contact with private and individual groups in providing services to the community. Meanwhile, according to Soepardi administarsi is the complete process of cooperation activities carried out by a group or more together and simultaneously to achieve the goals that have been set. In the administrative system there are also characteristics that need to be considered, according to Hidayaningrat (1996: 3) administration contains the first characteristics of human groups, consisting of two or more organizations, both cooperation between the group, thirdly the existence of activities or business processes, the fourth is guidance, leadership, and supervision, and the fifth is the purpose.

Based on the results of interviews and author observation related to the good administrative system in Oefafi Village, East Kupang District, Kupang Regency based on several explanations about the administration and characteristics of administarsi in Dsea oefafi East Kupang District Kupang Regency has been running optimally. Service to the community for correspondence has achieved maximum results, but related to bookkeeping, about archival and service mechanisms to the community of the government oefafi Village, East Kupan District Kabuapten Kupang has not been carried out optimally. For bookkeeping related to archives in oefafi Village, East Kupang District, Kupang Regency is not available which means that data for archives is lost.

4.2 Factors Hindering Village Fund Management In Oefafi Village, East Kupang District, Kupang Regency

The following are some of the factors inhibiting the management of village funds in Oefafi Village, East Kupang District, Kupang Regency:

4.2.1 Quality of Village Apparatus Resources

In this case, one of the factors for the success or failure of management implementation and in Oefafi Village is influenced by available human resources. Village funds will be managed properly as needed when functioned by human resources. In other words, if there are no human resources, then the components in the management of village funds will not be carried out properly which will have an impact on the non-implementation of a plan that has been agreed together with the community. Any village fund management must be based in accordance with human resources in this case the village device that manages the village funds must have the ability in the intended field.

The results of the elevation are also to support the above statement, it is known that the number of village devices in Oefafi Village, Kupang Timut District, Kupang Regency amounts to 8 people who have tasks and functions in each field described in detail in the table below.

Table 3: Number Of Oefafi Village Devices

No	Village Device Name	Total	Education
1	Village head	1	High School
2	Village Secretary	1	High School
3	Head of Government Section	1	High School
4	Head of Development Section	1	High School
5	Head of Welfare Section	1	High School
5	General Section Head	1	High School
6	Head of Hamlet	4	High School

Source : Oefafi Village Device Information Board (2021)

From the table above, it is known that the number of village devices in Oefafi Village is sufficient in accordance with the regent's rules, nam un in terms of education is still lacking because all high school educated devices are equal. Based on The Regent of Kupang Regulation Number 20 of 20201 concerning Village Devices, every village that must complete its devices is not complete by adding a sexist head with the lowest educational qualifications of equivalent high school and the highest education of serjana or magister.

It can be concluded that in the results of interviews and observations conducted by the author, human resources are the most important part of village fund management, ranging from planning to up to accountability and reporting of village fund management. Without human resources, the management of village funds will not be able to run well. Village fund management in Oefafi Village, East Kupang District, Kupang Regency has not been carried out effectively and efficiently to the maximum due to the absence of village fund management resources so that it is also an inhibitory factor in the management of village funds in Oefafi Village, East Kupang District, Kupang Regency.

4.2.2 Facilities and Infrastructure Supporting Government Administration Operations

Facilities and infrastructure are important components that can support the village fund management process, with complete and adequate infrastructure, the village fund management process in an efficiency and

effectiveness and kineraja response of the village government can be achieved quickly. Oefafi Village Government in this case the facilities and infrastructure available in the village office to support the services and process of managing village funds are not complete or not yet available properly.

Based on the results of interviews with the village secretary and the head of the planning section who is also in charge of infrastructure in the scope of the Oefafi Village government organization, the results of observations and interviews of the author found a phenomenon due to the unavailability of supporting devices for digital-based village fund management systems. Availability of infrastructure in this case a laptop or computer already exists but is limited and also constrained by the network. Because in the management of village funds in need the availability of lapto or computer to access data ranging from planning to reporting. Facilities and infrastructure equipment available within the scope of Oefafi Village office computer and printer 1 unit, maubeler 20 units consisting of tables, chairs, and cabinets.

The availability of facilities and infrastructure such as laptops and computers is an important component in the management of village funds, the infrastructure component is an important component to provide changes, with the availability of laptops or computers that more than one can accelerate the process of managing village funds and equalizing information to the community in an effective village fund management system and transparency.

5. Kesimpulan

Based on the results of research conducted by the authors related to the analysis of good governance of village fund management in Oefafi Village by Mardiasmo (2002;10) it can be concluded that:

1. Efficiency

It is known that efficiency is a way to achieve optimal goals (fast and precise) and according to desire by combining the resources expended, the resources included in this efficiency are energy, money, and time. In the management of village funds in Oefafi Village, East Kupang District, Kupang Regency, the achievement of goals by minimizing available resources has not been carried out optimally.

2. Effectiveness

Effectiveness is the process of achieving planned goals in accordance with the availability of budgeted costs, set time, and the number of personnel specified. In the management of village funds in Oefafi Village, East Kupang District, effectiveness has not been running optimally because the process of achieving goals is still constrained not according to the time specified according to planning.

3. Responsvitas

While responsiveness itself is the ability to recognize needs, compile agendas and priorities, develop programs according to the needs and aspirations of the community. In Oefafi Village, East Kupang District, the village government's responsiveness is still less than the maximum because it does not know the needs of the community so that the development of the program is not in accordance with the needs of the community.

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ANALYSIS OF DRINKING WATER SUPPLY SYSTEM MANAGEMENT IN VILLAGE-OWNED ENTERPRISES (CASE STUDY IN LENDOLA VILLAGE, TELUK MUTIARA DISTRICT)"

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ABSTRACT

The drinking water supply system which is an asset of Lendola Village managed by the Drinking Water Business Unit at the BUM Desa Lendola, was built since 1967 by the World Bank, in 2012 through the Alor Regency Special Allocation Fund (DAK), in 2018 through the Village Fund, and in 2019 Community Based Drinking Water and Sanitation Provision Program (Pamsimas). The results of the implementation of the three activities are then submitted to the Village Government to be managed by community groups.

This study uses a qualitative approach with 45 informants and the types of data are qualitative and quantitative data while the data sources in this study come from primary data sources and secondary data while the data collection methods in this study are field research, literature while data collection techniques in this study are observations, qualitative interviews and qualitative documents.

The results of the study found that the management of SPAM by the BUMDola of Lendola was not carried out according to the principles of governance which included professional, transparent and responsible, participatory, sustainable, fair, and consensus deliberation, so that drinking water services to the community did not meet the quantity and continuity requirements and did not an increase in village PAD. This is due to the lack of professionalism of the BUMDes management, the lack of transparency and responsibility for the BUMDes management, the lack of participation from the Alor Regency government with the Village Government, BPD, BUMDesa, and the Lendola Village community. This condition has also had an impact on the sustainability of the BUMDes business in the management of drinking water as one of the potentials of the village that should be managed for the welfare of the community.

Keywords: Water, Management, Village and Community

1. PRELIMINARY

Drinking water has an important and strategic role because it is a basic need for humans , other creatures , and is related to the lives of many people . Based on article 33 of Law Number 17 of 2019 concerning Water Resources, in the preamble considering letter (a) it states that " water is a basic need for human life given by God Almighty for the entire Indonesian nation". Drinking water, which is a basic need as a gift from God Almighty, is absolutely managed for the survival of life and to provide welfare for humans and other living creatures that inhabit the earth.

The availability and ease of access to drinking water for the community is then made one of the eight Millennium Development Goals (MDGs) targets, namely that by 2025 as many as 100% of the community must have access to clean water. To continue the MDS agenda, through 193 countries located at the United Nations Headquarters in Ner York, they agreed on a new global document entitled Transforming Our World The 2030 Agenda for Sustainable with 17 goals which are interrelated , mutually influencing, inclusive, and integrated with each other or no one is left behind (no one left behind). The concept of SDGs is more comprehensive, with a target for complete completion, is more participatory, and not exclusive, and not bureaucratic by involving stakeholders .

The importance of the availability of drinking water as a basic human need is discussed at every international meeting as stated by Sunaryo (2007:33), that based on the Dublin Statement (International Conference on Water and Environment) conference on 21-26 January 1992 in Dublin Ireland, that water is a It is an important part of the environment and is the container on which various forms of life and human well-being depend. Scarcity and misuse of clean water will face serious threats and increasing development and protection of the sustainable environment.

In the context of local government, The authority for drinking water management by BUMD, Village BUM, and community institutions has been regulated in several laws and regulations, including article 42 paragraph (1) letter c and article 49 of Government Regulation Number 122 of 2015 concerning Drinking Water Supply System relating to the implementation of SPAM implementation. by community groups, article 19 paragraph (2) letter a Regulation of the Minister of Villages, Development of Disadvantaged Regions, and Transmigration Number 4 of 2015 concerning the Establishment, Management and Management, and Dissolution of Village-

Owned Enterprises, that Village drinking water is one of the BUM Desa business units . Furthermore , Article 50 of Law Number 17 of 2019 concerning Water Resources contains the management of products in the form of drinking water for daily basic needs given to state-owned enterprises, regional-owned enterprises, or village-owned enterprises that administer SPAM.

As one of the autonomous regions in Indonesia, the Alor Regency Government in the framework of the Implementation of the Drinking Water Supply System (SPAM) with reference to the Attachment to the Alor Regent Regulation Number 35 of 2019 concerning Regional Policies and Strategies for the Implementation of Drinking Water Supply Systems in Alor Regency set 7 (seven) strategic issues, namely: 1) increasing access to safe drinking water, 2) developing funding, 3) increasing institutional capacity, 4) developing and implementing laws and regulations , 5) meeting the need for raw water for drinking water, 6) increasing the role of and partnership between business entities and the community , and 7) the implementation of SPAM through the application of technological innovations .

The drinking water supply system which is an asset of Lendola Village managed by the Drinking Water Business Unit at the BUM Desa Lendola, was built since 1967 by the World Bank, in 2012 through the Alor Regency Special Allocation Fund (DAK), in 2018 through the Village Fund, and in 2019 Community Based Drinking Water and Sanitation Provision Program (Pamsimas). The results of the implementation of the three activities are then submitted to the Village Government to be managed by community groups.

The community's drinking water needs which are managed by the BUM of Lendola Village are supported by having facilities and infrastructure in good condition, consisting of: 1) raw water units in the form of 2 (two) broncaptering units and a transmission pipeline network of 3,204 km, 2) production units in the form of 2 (two) units of two) reservoir units measuring 18 m³ and 22.5 m³, 3) distribution pipe units 3,219 km, where drinking water is taken from 2 (two) sources of raw water. The availability of drinking water facilities and infrastructure is sufficient, but it is not equipped with home connection facilities (SR) in the form of faucets and water meters.

The assumption of the use of drinking water in Lendola Village which is managed by the Clean Water Business Unit at the BUM of Lendola Village is as shown in Table 1 below.

Table 1. Use of Drinking Water as Needed

No.	Customer Type	Unit of Requirement	Number of Users	Drinking water requirement per day (m ³)
1	Household (431 Households)	60 liters/person/day	1,995 souls	159,600
2	Domestic industry	0.00	0	0.00
3	Social needs			
	a. Vocational High School 1 (one) unit	10 liters/person/hr	1,200 people	12.00
	b. Elementary School 2 (two) units	10 liters/person/hr	480 people	4.80
	c. TK/PAUD 3 (three) units	10 liters/person/hr	120 people	2.20
	d. Church 2 (two) units	1,000 liters/unit/day	2,000 people	2.00
	e. Mosque 3 (three) units	3,000 liters/person/day	9,000 people	9.00
	f. Office 7 (seven) units	25 liters/person/hr	42 people	1.01
	Total (1+2+3)			149.75
4	Leakage (20% of (1+2+3))			29.95
	a. Amount of water used			179.70
	b. Amount of water produced			648.00
	c. Excess water (idle capacity)			468,30

Source: Lendola Village Government

From Table 1 it can be explained that from the volume of 648 m³ per day produced from 3 (three) sources of water to be managed by the Clean Water Business Unit at BUM Desa Lendola, it is used to meet the daily needs of households (domestic) in 431 households with 1,995 people, social needs include 3 (three) church units, 3 (three) mosque units, 6 (six) schools, and 7 (seven) office units, the assumption is that leakage is 20% of the total household needs and social needs, so that with the use of drinking water of 179.70 m³ from water production of 648 m³ there is still an excess of drinking water of 468.30 m³, thus the quantity requirements are met.

In 2016 after the establishment of the Lendola Village BUM Management Board, the Lendola Village BUMDes' Articles of Association and Bylaws (AD/ART) were drafted and stipulated as a reference or guideline in the administration of drinking water institutions, as mandated in Article 11 of Government Regulation Number 11 of 2021 regarding Village-Owned Enterprises that every BUMDes in its operations is obliged to discuss and stipulate the Articles of Association and Bylaws (AD/ART) in the Village Deliberation. Although AD/ART has been made and stipulated, it does not clearly regulate the main tasks and functions of the drinking water management unit, both the chairman and its members.

Of the various efforts that have been made, including the development of SPAM, rehabilitation of SPAM, the establishment of BUM Desa which has been running for 5 (five) years in line with the spirit of Law Number 6 of 2014 concerning Villages, however, this institution has not yet functioned according to the purpose of establishing this Village institution. This is evident from the lack of BUM Desa activities in managing the potential of water resources which have an impact on added value for the economy in the village, but further than that, it is in the context of fulfilling drinking water for human health, which is one part of the government's efforts to increase the degree of health. Public health is currently also being faced with health problems such as stunting due to lack of water and poor sanitation.

From the quality aspect, the water source for drinking water needs in Lendola Village has not been fulfilled, especially in one of the water sources with open intake from water sources without any treatment (treatment), so it is potentially not feasible from the health aspect. Moreover, in the location of water sources, community and animal activities often occur, which have the opportunity to cause pollution problems. In addition, if there is a flood, the water used is relatively dirty so it cannot be used directly.

There is a leak due to the inappropriate use of water by the community, because it is used for other needs such as agriculture (plantation) and even water is wasted. Of course this is not in accordance with the basic principles of water as a common property, when every water uses water it is necessary to also pay attention to other people who will also use it. As in Table 1 , the drinking water entering the water treatment unit which reaches 648 m³ has water leakage reaching 65.32%, much higher than the required 20%.

From several problems related to drinking water management in Lendola Village from 1967 to 2020, both before the BUM Desa Lendola was formed and after the BUM Desa was formed and in particular after the BUM Desa institution which was formed from 2015 to 2021 (in July) that management of the SPAM drinking water supply system which is a unified drinking water supply facility and infrastructure in providing drinking water services to the community in the village in line with the spirit of the Village Law Number 6 of 2014 concerning Villages as the purpose of establishing a Village-Owned Enterprise is an absolute thing to do .

Observing these various conditions at this time, it has prompted the author to conduct a research entitled "Analysis of the Management of Drinking Water Supply Systems in Village-Owned Enterprises (Case Study in Lendola Village, Teluk Mutiara District)".

2. LITERATURE REVIEW

a. Analysis and Management

Komaruddin (1994:31) analysis is a thinking activity to decompose a whole into components so that they can recognize the signs of the components, their relationship to each other and their respective functions in a unified whole. Through governance, it will help describe various problems so that they can find out the actual situation into parts or components, then the relationship with each other and the function of each part of the whole into a single unit, while management (Management) requires a process of interaction in the work environment. The management view is also expressed by Leonard D. White quoted by Sarinah (2017: 10) management is a whole process, usually found in all groups, whether state, government or private, civil or military businesses on a large scale or on a small scale. This explains that management is a process within an organization or group, both large and small, both government and non-government to achieve goals.

As well as the opinion of The Liang Gie quoted by Sarinah (2017:10) that management is the entire process of organizing in every collaborative effort of a group of people to achieve certain goals. Management can not be separated from collaboration through a certain process to achieve goals.

b. Governance in Public Service

Various views on organizational governance as by Amin (2012:19) have very diverse meanings . Traditionally, the concept of governance refers to the making and controlling of decisions in organizations, particularly regarding work structures and procedures. Broadly, the notion of governance includes the relationship between the organization and its stakeholders. This opinion says that there is interaction with each other with each other in an organizational relationship.

The purpose of governance as according to Amin (2017:21) is to create value for all interested parties. There are 5 (five) important elements in governance, namely transparency, accountability, responsiveness, independence, and fairness.

There are also United National Development Programs (UNDP) as quoted by Hayat (2017:171) proposes several characteristics of good governance as follows:

1. Participation _

Every citizen has participation in decision making directly or indirectly. Participation is the key to community success in constructive communication.

2. Rule of law

The legal framework must be fair and enforced indiscriminately. The law must be strong and sharp. The law must not discriminate for the benefit of individuals or groups. The law must be used as the foundation of enforcement for justice and benefit.

3. Transparency (Transparency)

Transparency for information disclosure, that citizens have the right to know all forms of information that are public consumption. Information must be provided by public institutions to the public through various media as a form of supervision and control from the public over the actions and decisions of state administration.

4. Responsiveness (Responsive)

Be sensitive to the needs and conditions that exist as a form of providing good and quality services. The government must be responsive to the needs of the community. Every service is actually meeting the needs of the community.

5. Consensus orientation

Good governance mediates different interests to obtain the best choice for the wider interest, in policies and procedures.

6. Equity _

Every citizen is given the authority to improve welfare. Article 27 paragraph (2) of the 1945 Constitution states that every citizen has the right to work and a decent living for humanity.

7. Effectiveness and efficiency

Processes and institutions produce in accordance with what has been outlined by using the available resources as best as possible as well as the available resources for maximum results in the administration of the state.

8. Accountability _

Every decision and public policy must be fully accountable to the community or the actions of an institution or agency to their superiors. The accountability aspect is a form of accountability to the authorities as a form of control over the performance that has been carried out.

9. Strategic vision (Strategic Vision)

The perspective of good governance must be interpreted broadly and comprehensively and globally. The achievement of good governance must be carried out in a visionary manner by the leaders and state apparatus.

3. METHOD

Research uses a qualitative approach that is holistic, inductive, and naturalistic. Thus, this research will assess, research, and describe how the management regarding the governance of the drinking water supply system and a number of problems encountered in the governance of the drinking water supply system in the BUM Desa Lendola are encountered.

Informants totaled 45 people with qualitative data and quantitative data while the data sources in this study came from primary data sources and secondary data while the data collection methods in this study were field research, library research, while data collection techniques in this study were This research is observation, qualitative interview and qualitative documents.

In analyzing the data, the data obtained by the researcher used the data analysis technique proposed by Bungin (2012:70), which is as follows:

5. Data Collection (Data Collection)

Data collection is an integral part of data analysis activities. Data collection activities in this study were using interviews and documentation studies.

6. Data Reduction (Data Reduction)

Data reduction is defined as the selection process, focusing on simplification and transformation of rough data that emerges from written notes in the field. Reduction is carried out since data collection begins by making summaries, coding, tracing themes, making clusters, writing memos and so on with the aim of eliminating irrelevant data/information.

7. Data Display

Display data is a description of a set of structured information that provides the possibility of drawing conclusions and taking action. The presentation of qualitative data is presented in the form of narrative text. The presentation can also be in the form of matrices, diagrams, tables and charts.

8. Verification and Confirmation of Conclusions (Conclusion Drawing and Verification)

Is the final activity of data analysis. Drawing conclusions in the form of interpretation activities, namely finding the meaning of the data that has been presented.

4. DISCUSSION

Drinking water management at BUM Desa which will be an elaboration of several opinions related to governance, namely, United Nations Development Programs (UNDP), BUM Desa Governance according to the Strategic Study Center of the Ministry of Villages for Development of Disadvantaged Regions and Rural Areas, Government Regulation Number 21 of 2021 concerning Village-Owned Enterprises and Management of Drinking Water Supply Systems according to the Regulation of the Minister of Public Works and Public Housing Number 27 of 2015 concerning the Implementation of Drinking Water Supply Systems, as shown in Table 2 below:

Table 2. Drinking Water Management in Lendola Village BUM

No.	Governance				
	UNDP	Center for Strategic Studies Kemen DPDTT	PP Number 11 of 2021 About BUMDes	PUPR Candy (Pokmas for SPAM Management)	Used In this research
1	Participation (Participation)	Participation	Participation	Participation	Participation
2	Rule of Law (law supremacy)	Transparent	Open and responsible-answer	discussion consensus	Open and responsible answer
3	Transparency (Transparent)	Emancipation	Professional	Justice	discussion consensus
4	Responsiveness (responsivity)	Accountability	Source priority local power	Continuity	Justice
5	Consensus Orientation (Consensus Orientation)	sustainable	-	kinship	Continuity

6	equity (Similarity)	cooperative	-	mutual- team	Professional
7	Effectiveness and efficiency (Effectiveness and efficiency)	-	-	-	Local resource priority
8	Accountability (responsibility)	-	-	-	kinship
9	strategic vision (Strategic Vision)	-	-	-	Mutual cooperation

Thus, from some of these opinions, the authors choose and use Water Supply System Management at BUM Desa which is an elaboration of several opinions which include 9 principles, namely: 1) participation, 2) open and responsible, 3) deliberation and consensus, 4) fairness. , 5) sustainability, 6) professional, 7) priority of local resources, 8) kinship, and 9) mutual cooperation with the results of research and discussion as follows:

1. Professional

a. Rules /rules regarding BUM Desa and SPAM Used

In relation to the factors that are a problem for BUMDes in the management of SPAM regarding the rules/rules that the Alor Regency Regional Regulation concerning the 2019-2024 Alor Regency RPJMD, especially the strengthening of government and community institutions based on law has not been implemented through policies in the form of programs/activities to the community . The implementation of the policy of the Alor Regency Government is so that village institutions have the ability and independence to face challenges in managing the potential in the village. In facing these challenges by Handoko, TH , et al (2012; 17), that the existential gamble of an organization in the midst of the dynamics of very fast change makes the need to be able to survive (sustainable challenges) more sourced from toughness, awareness and internal strength to can act professionally and proportionately in the face of every challenge and opportunity . Although strengthening community institutions is one of the missions of the Alor Regency Government which has been outlined in the Alor Regency RPJMD 2019-2024, it has not been implemented through budget policies in increasing the institutional capacity of Lendola BUMDes to optimize the functions of existing facilities and infrastructure.

This condition is reflected in the low role of the Lendola BUMDesa to be able to produce by providing drinking water services to the community in a fair and equitable manner according to quantity and continuity requirements as well as increasing Lendola PADesa. The role of the Alor Regency Government is given to encourage the ability of the Lendola BUMDesa and other community institutions which are still minimal to be able to optimize all potential resources owned, including human resources, facilities and infrastructure, drinking water, customer communities, and other social potentials, instilling an institutional role for provide services and maintain public trust in the institutions that have been formed. In addition, the Alor Regency Government has not optimized the strengthening of the institutional role of the Lendola BUMDesa so that it can be successful in running its business by instilling enthusiasm so that it does not only generate profits and provide services in order to meet the drinking water needs but more than that, it can expand its business and be able to survive the challenges that arise. increasingly complex, and capable of being an example for goodness in protecting the environment and protecting the social environment.

b . Competency of HR managers of Lendola Village BUM

The unprofessional Lendola BUMDesa manager because without having intellectual abilities and also being supported by integrity and compliance with regulations has caused SPAM management by BUMDesa to be poor. The selection of Lendola BUMDes management in order to obtain professional human resources in accordance with the provisions but not yet implemented by the Village Government has resulted in management who do not have adequate competence and qualifications according to the field of duty (profession). As a result of the resulting performance in achieving the goals, namely drinking water services to the community and increasing PADesa, it did not materialize.

c . Qualifications of HR managers of BUM Lendola Village

most of the administrators meets the qualification requirements, namely education of at least high school or equivalent except for the Chair and members of the Clean Water Business Unit who do not meet the requirements. The knowledge of the Lendola BUMDesa manager obtained through formal education as according to Walker (1992; 64) that education is provided by the organization to equip employees to develop their capacity to anticipate and face the future . BUMDes management who do not have qualifications through

formal education regarding business business in SPAM management and how to develop a business, such as the Head of the Clean Water Business Unit who has an elementary school education will show limited intellectual abilities in managing Lendola Village SPAM according to their abilities.

2. Open and Responsible

a. Availability of information about SPAM Management at BUM Desa Lendola

In the management of SPAM in Lendola Village, the BUMDes management does not provide information for the public to know. If the information is available, it is only incidental activities which are usually conveyed through the Heads of Neighborhood Associations or through houses of worship to be conveyed to the community/community, for example with regard to pipe repair activities, clearing landslides on pipelines, or planting plants at water source locations. Meanwhile, the information about the management in question that is not available is related to how drinking water services to the public are provided by BUMDes.

Information about SPAM management that was not provided by the BUMDes management to be conveyed to the community had an impact on decreasing the trust of the Lendola Village community and proved that there was no evidence that the management was unable to carry out the mandate given, even though there was minimal activity. The unavailability of information causes the public not to know the conditions, problems, and work plans of BUMDes in managing SPAM in the form of reports. The availability of information for the public to know will be very important so that the performance of the Lendola BUMDesa management can be evaluated and the community can provide input related to SPAM management both now and in the future.

b. Ease of obtaining information about SPAM management at BUM Desa Lendola

Regarding the ease of information about SPAM management at Lendola Village BUM, it was found that because there was no information provided by Lendola Village BUM so there was no ease of information. The ease of getting information about SPAM management will be very useful for the community (customers) to find out the extent of the activities of the Lendola BUMDola. Lendola Village as one of the villages located on the outskirts of the city has experienced the impact of advances in the field of communication technology (internet) which is already familiar to the community. However, various forms of information media that allow it to be used such as through websites, social media, bulletin boards, announcements through regular religious, government and social meetings are not utilized by Lendola BUMDola.

c. SPAM Management Accountability

Report on BUM Desa Lendola

BUMDes did not submit the Manager's Performance Report because there were no activities and no personnel working on the report. The report is made so that the activities of the Lendola BUMDesa management have operational meaning as outlined in the report as an evaluation of performance.

Regarding the Business Performance Report related to the factors that become problems with SPAM governance by the Lendola BUMDola that has never made and submitted a Business Performance Report because there were no activities and no one made a report. Since the year BUMDola was founded in 2015 it has never made and submitted a Performance Report and because there are no activities or activities but very minimal shows the performance of this institution is very poor with regard to SPAM management.

With regard to the Financial Statements, the Lendola BUMDesa Agency did not submit the Financial Report because there were no activities and no personnel working on the report. Financial reports must be presented in accordance with Village Financial Accounting Standards.

3. Participatory

a. District Government Support and Contribution to SPAM Management in Lendola Village

Based on information about the factors that become problems with SPAM management by the Lendola BUMDola related to the support and contribution of the Alor Regency Government according to the Head of the Alor Regency Research and Development Planning Agency and the Head of the Settlement Area Division of the Alor Regency Housing and Land Affairs Office that through DAK and The Community- Based Drinking Water and Sanitation Provision Program (Pamsimas) of the Alor Regency Government has provided support for drinking water needs in Lendola Village, but it has not been managed through village community institutions. It is evident that out of the 13 (thirteen) Rukun Tetangga there are 7 (seven) Rukun Tetangga who have not received drinking water services in accordance with the quantity and continuity requirements and there is no PADesa. District government support through the provision of facilities and infrastructure was not responded to by the Lendola Village Government and the Lendola Village community by optimizing the assistance received.

b. Support and Contribution of the Village Representative Body to the Management of SPAM in Lendola Village

Regarding the factors that become problems for SPAM governance by Lendola BUMDola related to the support and contribution of SPAM management that BPD provides financial support to manage clean water but BUM Desa has not worked as expected, then in carrying out its supervisory function, the Lendola Village Government through BUMDes in carry out their responsibilities by observing management that is not going well.

The BPD's supervisory function of the BUMDes has not yet been implemented, namely by assessing and evaluating the performance of the Lendola BUMDes that do not play a role in accordance with their responsibilities to be reported and discussed in village community forums. In the absence of a report submitted at the Lendola Village deliberation forum by BPD Lendola by observing the community's aspirations for the uneven condition of drinking water services and no increase in PADesa, there has been no improvement in the performance of SPAM management in Lendola Village.

d. BUM Desa Support and Contribution to SPAM Management in Lendola Village

Lendola BUMDola management in clean water management does not work as expected according to the authority and responsibility received due to limited facilities and infrastructure which are factors that become problems for SPAM governance by Lendola BUMDola related to the support and contribution of BUMDesa, as according to the Technical Management Manual. SPAMS and Strengthening the Sustainability of the Pamsimas Program (2021; 3) that sustainable management at the community level aims to ensure that the drinking water supply system that is built is maintained so that it is able to provide and even increase the reach of drinking water services .

In the context of sustainable SPAM management, Lendola BUMDola has not made any efforts to support it by maintaining the existing drinking water supply system properly through the regulation of drinking water services to the community, rearranging the drinking water network, determining and collecting drinking water usage fees, controlling the installation of illegal house connections. by the community, as well as ensuring the condition of facilities and infrastructure is maintained. Contributions that are not collected from the use of drinking water by the community and control of efforts to install house connections on the network illegally which causes network conditions to become damaged and causes water to flow without obstacles so that the function of facilities and infrastructure is reduced.

4. Priority of Local Resources

From the factors that become problems for SPAM management by the BUMDola of Lendola related to the priority of potential local resources in Lendola Village that drinking water is one of the potential local resources owned by the Village, but has not been managed by BUMDes properly.

Water is one of the potential resources in Lendola Village and is managed by Lendola Village BUMDas as referred to in Article Lendola Village Regulation Number 7 of 2015 concerning Village-Owned Enterprises paragraph (1) Business BUMDes are Production, Marketing and Service Processing Units and paragraph (2) Units production, marketing and service processing as referred to in paragraph (1) includes drinking water, electricity, basic necessities; marketing of commodity products; and perkiosan . Drinking water is one of the potential resources in Lendola Village which is managed by BUMDes, but this effort has not been carried out optimally, both through the use of human resources and the allocation of adequate funds for optimizing facilities and infrastructure. The use of information technology that has not been optimal as a medium in drinking water management is also an indicator that the Village Government and BUMDes have not placed drinking water resources as potential Villages to be managed properly.

5. Sustainability

a. Development of Drinking Water Sales Turnover

The income (turnover) of the Lendola BUMDola obtained from revenue sources, both the Village Fund and water usage fees until 2021, is not recorded properly, so the value cannot be known. Turnover from drinking water business through payment of drinking water usage fees is recorded, as shown in Table 3 below.

Table 3. Turnover of BUM Lendola Village in 2021 (until July 2021)

No.	BUMDes Management Business Unit	Type Business	Mark Turnover (Rp)	Information
1	Convenience	Kiosk	200,000,000.00	Village

	Store Business Unit			Government capital participation
2	Commodity Business Unit	-	-	-
3	Clean Water Business Unit	Water usage fee	-	-
4	Savings and Loan Business Unit	Save and borrow money	-	-

Source: Lendola Village BUM

From Table 23 it can be explained that there is no recorded turnover from the drinking water business by BUMDes either from water usage fees or from other sources of income. In fact, for the sake of the sustainability of SPAM management, it requires income from various business sources, especially in the context of optimizing the function of facilities and infrastructure. The Village Fund as a reliable source of income to finance SPAM optimization is not available. Likewise, there is no turnover from collecting drinking water usage fees as potential income due to the inability and commitment of the Lendola BUMDes management in managing SPAM. The Village Government, BPD, and the community can allocate Village funds as turnover in the management of SPAM if the BUMDes can convince them to manage SPAM in Lendola Village in a professional manner. Furthermore, the community of Lendola Village as drinking water users can provide support by paying regular fees and not taking water illegally in the field, if the BUMDes management can work in full responsibility.

b. Drinking Water Business Profit/Loss

As regarding the factors that become problems with SPAM management by BUMDola Lendola related to profit/loss, that there is no profit because there is no balance from the BUM Desa Lendola and the Heads of Neighborhood Associations from the drinking water business. According to Purwanto (2020;4) advantages (profit) is the difference or difference between things obtained (revenues) and things paid or issued (expenses). In the absence of recorded and unsaved income from the results of the drinking water management business by Lendola BUMDola, so that no profit is obtained. Regarding the business activities of the Lendola BUMDesa in the management of SPAM which do not get the expected profit, then according to Ferrell as quoted by Purwanto (2020; 5), there are three main business activities, namely management, marketing, and finance. In relation to the management of SPAM by BUMDola Lendola, the main business activities, both in terms of management, marketing, and finance, are not going well. Regarding the management aspect, the BUMDes management is not able to manage the drinking water business by using adequate employees or human resources and other resources they have to earn income and profits. From the marketing aspect, the BUMDesa management is unable to find market opportunities from the Lendola Village community to obtain income and profits from this SPAM business, while from the financial aspect there is no income and profit from the Lendola BUMDola business results for the benefit of business management and development.

For this reason, taking into account the average volume of water usage per household is 22.11 m³ per month (Data from PDAM customers in Lendola Village) which is equated with 431 households using water customers from the village using a water usage fee of Rp. 1,500.00 per m³, then the monthly BUMDes income can be calculated from household use and social needs, including in 5 (five) houses of worship, 6 (three) schools, and 7 (seven) offices as follows:

- | | |
|--|----------------------|
| a. 431 Households x Rp. 1.500.00 x 22.11 m | = Rp. 14,294.115, 00 |
| b. School Rp. 1.500.00 x 570.00 m ³ (6 units) | = Rp. 855,000.00 |
| c. House of worship Rp. 1.500.00 x 330.00 (5 units) | = Rp. 495,000.00 |
| d. Office Rp. 1.500.00 x 6.00 m ³ (7 units) | = Rp. 9.000,00 |
| Amount (income) | = IDR 15.6 53,115.00 |

From these calculations, it is further proposed for the use (expenditure) and the benefits obtained as shown in Table 4 below.

Table 4. Estimated Monthly BUMDes Operational Financing for Clean Water Business Units

No	Fee Type	Sat	Volume	Unit Price (Rp)	Total Price (Rp)
A	Reception				15,653,115,00
	Water usage fee 431 RT	m3	22.11	1,5000.00	15,653,115,00
B	Shopping				15,145,000.00
1	Production/Maintenance and Development Costs (30%)				4,695,930.00
	a. Raw materials (chlorine, etc.)	ls	1	150.000,00	150.000,00
	b.Overhead				
	1) The cost of procurement of pipes and accessories	ls	1	1,300,000.00	1,300,000.00
	2) Non labor costs Production (registrat the number on the water meter and water source)	org	4	750,000.00	3,000,000.00
	3) Work Equipment Cost	ls	1	75,930.00	75,930.00
	4) Electricity and water costs	ls	1	170,000.00	170,000.00
2	Personnel Cost (35%)				5,4500,000.00
	a. Chairman	org	1	750,000.00	750,000.00
	b. Secretary	org	1	600,000.00	600,000.00
	c. Treasurer	org	1	600,000.00	600,000.00
	d. Technical Chief (Unit Head Clean Water Business)	org	1	1,300,000.00	1,300,000.00
	e. Technical Team Member (2 members of the Water Business Unit Clean)	org	2	1,1000,000.00	2,200,000.00
3	Administration fee (10%)				1,593,906.00
	a. Office stationery	ls	1	250,000.00	228,606.00
	b. Print and Copy	ls	1	270,000.00	165.300.00
	c. Administration staff (1 member of Water Business Unit Clean)	org	1	900,000.00	700,000.00
	d. Computer rental	ls	1	500.000,00	500.000,00
4	Reserve (15%)	ls	1	2,347,967.00	2,347,967.00
5	PADesa (10%)	ls	1	1,565,312.00	1,565,312.00
	Difference (Rp)				0.00

Sources: Results Analysis based on interviews with BUMDola managers

Based on the results of the analysis in Table 23, there is a reserve (15%) or Rp. 2,347,967.00 (two million three hundred forty-seven thousand nine hundred and sixty-seven rupiahs) every month or in the amount of Rp.

28,175,604.00 (twenty-eight million one hundred seventy-five thousand six hundred and four rupiah) annually and Lendola PADesa Rp. 1,565,312.00 (one million five hundred sixty five thousand three hundred and twelve rupiahs) every month or a year in the amount of Rp. 18,763,744.00 (eighteen million seven hundred sixty-three thousand seven hundred forty-four rupiah). From this business, it can accommodate as many as 8 (eight) workers and provide drinking water services evenly to 431 households or 1,995 inhabitants of Lendola Village. From the business opportunities that can be carried out so that they have an impact on drinking water services to the people of Lendola Village, the receipt of profit for Lendola Village PA, and the absorption of labor in Lendola Village that is not obtained, it shows that Lendola Village BUMDola has an inability to manage BUMDesa.

Taking into account the total water production every month of 7.5 liters/second based on the assumption that all drinking water produced can be sold, among others, for household needs, social needs, and the remaining for industrial needs, sales of tank cars, inland fisheries, and gallon water business, and taking into account leakage (20% of total drinking water production), it can be calculated the amount of water production that can be sold, namely:

- | | |
|--|----------------------------|
| a. Water production (7.5 lt/s) | = 19,440.00 m ³ |
| b. Leakage 20% of production | = 3,880.00 m ³ |
| c. Amount of water that can be sold (c = ab) | = 15,552.00 m ³ |

From the amount of drinking water that can be sold is 15,552.00 m³ x Rp. 1,500,00 then the amount of revenue from drinking water business in Lendola Village which is managed by BUMDes every month is Rp. 23,328,000.00 (Twenty three million three hundred twenty eight thousand rupiah).

6. Justice (equity and emancipation) and environmental sustainability

a. Treatment (services) to BUM Desa Managers

In terms of treatment (services) to BUMDes managers related to the factors that become problems with SPAM management by Lendola BUMDes, the Lendola BUMDes management has not been given compensation (salary) because the managers have not received adequate contributions to finance wages/salaries. As according to the Big Indonesian Dictionary), that salary is wages from work that are paid in a fixed time, or remuneration received by workers in the form of money based on time. Although the salary which is a reward for work is not received by the SPAM management because there is no income from drinking water usage fees from the community or from other legitimate receipts.

The salary as a reward for the work carried out by the manager of the Lendola BUMDola is determined by the income from the business. Meanwhile, the Lendola BUMDola management does not collect water usage fees to the entire community. Income as a contribution to pay salaries is not obtained because BUMDes do not provide good and satisfactory drinking water services according to community expectations so that people do not pay dues, either because they forget to pay, intentionally do not pay, or do not want to pay.

The management of the Lendola BUMDesa in the management of SPAM cannot receive compensation (compensation) in the form of salary from the collection of drinking water fees by the water user community if the management does not improve the drinking water service system including regulating and controlling water use and enforcing rules so that water can be distributed evenly. and fair to all communities as a form of service to the community.

B. Treatment (Service) of Drinking Water to the Community

In the context of the treatment (service) of drinking water to the community related to the factors that become problems in the management of SPAM by the BUMDola Lendola that the service has not been evenly distributed, it is not yet fair and equitable to the community, because the BUMDes management has not worked well in managing SPAM, as in article 2 letter c of Law Number 17 of 2019 concerning Water Resources it is stated that the management of water resources is carried out evenly to all levels of society in the territory of the country so that every citizen has the right to have the same opportunity to play a role in managing water resources and using water resources. .

Efforts to preserve and protect have been carried out by BUMDes together with the Lendola Village community by involving various communities, but these efforts have not been well planned and programmed. This condition causes many efforts to be unsuccessful, such as the planted trees do not grow well because there is no maintenance either by the BUMDes or certain communities assigned to preserve the trees that have been planted in water sources. As for efforts to maintain water quality, the existence of various activities and

community occupations around the water source area can have the opportunity to cause water quality problems because of the waste generated by the community. Prohibition of human actions to throw solid and liquid waste around water sources needs to be done. To provide water services that meet quality requirements during flooding (cloudy water), it is necessary to treat the BUMDes to manage water by providing a Water Treatment Plant (IPA) or Slow Sand Filter (SPL), so that the water produced becomes drinkable. .

7. Deliberation of Consensus

As regarding the factors that become problems with SPAM governance by Lendola BUMDola regarding SPAM management, that as in the annual deliberation, periodic deliberation activities to discuss clean water management because clean water management is not included in the annual program/activities that are planned and implemented for discussion and evaluation in regular meetings , according to Palupi, S., et al (2016; 44) that because it involves important matters, the Musdes can be held more than once . In the implementation of the Annual Village Deliberation, it did not discuss the management of SPAM by the BUMDola of Lendola as one of the village's priority annual programs, so the agenda for evaluating the management of SPAM was not discussed in the Periodic Deliberation.

Deliberations/annual meetings, regular deliberations/meetings, and special deliberations/meetings discussing the management of drinking water that are not carried out have resulted in the absence of commitment from the Village Government and BUMDes in fixing good SPAM management. Placement of water management as one of the potential resources in Lendola Village to be managed only in words but not implemented. Village Deliberations as a medium for fixing SPAM management are not actually used by the Village Government and BUMDes in rearranging SPAM management to make it better in accordance with its function. This causes the condition of drinking water management not to change and remains poor in its management, both for drinking water services to the community and the acceptance of PADesa Lendola.

8. Family

a. Family in Lendola Village BUMDola SPAM Manager Environment

Relations within the BUMDes management environment are very close, built on a loving relationship as one family. This is shown by the togetherness in the management of SPAM in Lendola Village. However, this relationship is not supported by the ability of the Lendola BUMDola management in managing SPAM so that drinking water services to the community and the increase in Lendola's PADesa have not been seen.

Family is still practiced in community life in Lendola Village because of the blood ties and other family relationships they have, but this is not realized by people who use water and allow water to spill in their yards without control. In such communities, they forget that some people who do not get water regularly according to the amount are their families who should feel the same way as they experienced. This condition, which some people are not aware of, has led to continued injustice and equity in the use of water in Lendola Village, where 6 (six) Neighborhood Associations received water smoothly and in sufficient quantity, while 6 (six) did not.

9. Mutual cooperation

Many people who are not involved in gotong royong activities in Lendola Village are due to various factors, including being busy at work, not caring, or feeling that these activities are the business of the BUMDes and the Heads of Neighborhood Associations and not their responsibility. Even with the increasingly high demands of life, the people of Lendola Village, who used to work together without demanding wages, now have to take into account the compensation for every job they do to meet their needs.

Due to the small number of residents involved in mutual cooperation activities for the management of SPAM, the Village Government, BPD, and Lendola BUMDola are not building an understanding that every citizen who gets drinking water from BUMDes activities has the same obligations in mutual cooperation activities. On the other hand, the community has not realized their responsibility as good citizens to participate in development, by giving time and energy to develop their village.

The community feels the benefits of this gotong royong activity. Every activity that has an impact on changing people's lives is expected to provide benefits for the whole community, as the mutual cooperation activities in Lendola Village as according to Jamaluddin, AN .(2016; 13) that development does not only focus on creating high economic growth, but also on the realization of better quality of life, equity, and social justice . The gotong royong activity in the context of managing SPAM in Lendola Village as an effort to improve the health status of the community as a form of community participation, has seen the results but not all residents. This mutual cooperation activity is only carried out if a disaster occurs or there is a community activity in the form of planting plants together at the location of the water source. The benefits of this gotong royong activity should

not only be felt by the community in the 6 (six) Neighborhood Associations who receive drinking water according to the quantity and continuity requirements, but also by the community in the 7 (seven) Neighborhood Associations who do not get drinking water. gotong royong simply restores the original condition of facilities and infrastructure, without paying attention to the service aspect to all people who do not get drinking water smoothly in order to obtain it fairly and equitably, as well as aspects of social justice and equity in the distribution of drinking water to all communities from mutual cooperation.

Gotong royong is a tradition handed down by ancestors and is still valid in Lendola Village, but is starting to fade. This can be seen in people's lives in the practice of gotong royong, especially the management of SPAM in Lendola Village, which is only followed by a portion of the community, namely between 30 to 40 people. This condition is certainly a challenge in people's lives because of the lack of the role of the Lendola Village Government in providing understanding to the community to continue to maintain the values of gotong royong as a tradition in the village and practice it, in which the community must also be able to distinguish activities that can be carried out in mutual cooperation. and what can be done by getting paid.

5. CONCLUSION

1. The management of SPAM by the Lendola BUMDola is not carried out in accordance with governance principles which include being professional, transparent and responsible, participatory, sustainable, fair, and deliberation, so that drinking water services to the community do not meet the quantity and continuity requirements and there is no increase in Village PAD. . This is due to the lack of professionalism of the BUMDes management, the lack of transparency and responsibility for the BUMDes management, the lack of participation of the Alor Regency government with the Village Government, BPD, BUMDes, and the Lendola Village community, not being able to optimally manage drinking water as a potential resource in the village, lack of the application of the principles of justice, the values of kinship and mutual cooperation are fading, and deliberation and consensus that does not pay attention to drinking water as one of the priority programs in Lendola Village which are followed up in management practices. This condition has also had an impact on the sustainability of the BUMDes business in the management of drinking water as one of the potentials of the village that should be managed for the welfare of the community.
2. The Regency Government and Lendola Village Government have not made efforts to encourage increased management performance and business performance through budget allocations in the context of optimizing available facilities and infrastructure and providing assistance to Lendola Village BUMDes management so that they are able to work in providing drinking water services fairly and equitably to the entire community. and can increase the PADesa Lendola.
3. The village government and BUMDola have not encouraged the support and responsibility of the community to pay dues at a fair value as a manifestation of their responsibilities in the context of sustainable SPAM management in Lendola Village.
4. The community of Lendola Village has not provided support for the sustainability of SPAM management by paying regular water usage fees and complying with the stipulated provisions by maintaining and maintaining existing water facilities and infrastructure.
5. The noble values that are inherited to the community in Lendola Village which are currently practiced in daily life through the management of SPAM management by the Lendola Village BUM, including kinship, deliberation and mutual cooperation are starting to fade, because a new culture has been born. namely egoism and individualism.

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DEVELOPMENT OF ARCHIVE DIGITIZATION TO IMPROVE PUBLIC SERVICES AT THE KUPANG REGENCY POPULATION AND CIVIL REGISTRATION SERVICE

Ignasius Pati¹, Peus Kase² and Hendrik Toda³Students¹ and Lecturer^{2,3}, Postgraduate Public Administration Science, Nusa Cendana University**ABSTRACT**

The development of archive digitization is useful for converting conventional archive forms into electronic or digital forms. The digitization of archives is carried out as an effort to save information for the future at the Kupang Regency Population and Civil Registration Office. The method used in this study is a qualitative research method with a case study approach, which will be carried out from August to September 2021 at the Kupang Regency Population and Civil Registration Office. The types of data in this study are qualitative data and quantitative data, while the data sources in this study come from primary data sources and secondary data, while the data collection methods in this study are field research, library research, while data collection techniques in this study are This research is observation, qualitative interview and qualitative documents. In analyzing the data, the data obtained by the researcher used the data analysis technique proposed by Bungin (2012: 70), namely; (1) Data Collection, (2) Data Reduction, (3) Data Display and (4) Conclusion Drawing and Verification

Keywords: Archives, Digitization, and Services.

INTRODUCTION

The enactment of Law Number 32 of 2004 which was later replaced by Law Number 23 of 2014 concerning Regional Government provides the widest possible space for regions to take advantage of all their potential in order to advance the region. Regional autonomy provides authority and opportunities for regions to carry out program activities according to regional needs in order to achieve community welfare and create good governance.

The implementation of regional autonomy cannot be separated from globalization, which is increasingly developing rapidly. These changes also create new demands and needs for the community which then force public organizations, both government and private, to be able to make improvements and use technology to support organizational effectiveness, efficiency and productivity. In meeting the demands of society in line with democratization and development of global technology is the performance of public services that are more efficient, fast-paced, transparent, communicative and computerized.

In the world of technology, many countries have changed everything from the way humans work to communicating and the use of IT or the Internet of things to encourage the world to try to change service modes. In line with this, Gottschalk (2006:10) states that the internet is a very important new technology and it is not surprising that it has received so much attention from entrepreneurs, executives, investors, and business observers and many assume that the internet changes everything, making all the old rules about company and competition are obsolete. Therefore, the government is required to move quickly in responding to the needs of the community progressively by implementing an Electronic-Based Government System (SPBE). Globally, Indonesia's SPBE index increased from 107th in 2018, now increasing to 88th. This is a very good improvement in the implementation of digital transformation in Indonesia.

Not only in Indonesia but also worldwide, the government aims to transform public administration, to adapt to a changing environment and overcome social challenges. Transformational goals include realizing organizational change beyond improving service delivery to citizens, facilitated by the use of information technology to create public value (Stoker, 2006) and increasing government responsiveness and openness (Banister and Connolly, 2014). Central to the idea of public value creation is that it reflects the ongoing shift in social values in collaboration with different stakeholders (Stoker, 2006). Thus, what can be seen in the context is a broader shift from bureaucratic forms of government to networked forms of government (Klievink et al, 2016), which aims to enable greater accountability of public administration (Stoker, 2006). Digital government is seen as a facilitator or even a driver of this transformation (Banister and Connolly, 2014).

In practice, this is often realized through the development of digitalization of public services, here referred to as e-services (Lindgren and Jansson, 2013) and associated changes in organizations (Veenstra, 2011). Despite the high ambitions that drive digital government development initiatives, such as the development of public services, it is often difficult to see what transformation digital government implementation actually enables (Cordella and Bonina, 2012, Goldfinch and Wallis, 2010). The development of e-services is strongly influenced

by the particular organizational context and therefore should not be understood as mere web pages. In short, the development of digitizing public services is more than just developing information technology. As such, efforts to digitize public services typically affect multiple stakeholders, often in different parts of government and society (Axelsson et al, 2013).

To achieve the basic governance mastery required, the development of public services is made possible by organizational change (Veenstra, 2011). The subsequent development of e-services is associated with many challenges, such as understanding user needs and expectations (Milard, 2015, Voorberg et al 2015), involving stakeholders in various phases of development (Holgersson and Karlsson, 2014) and maneuvering within organizations, which is often, contradictory and ambiguous in the context in which economic and democratic values need to be considered (Lindgren and Jansson, 2013).

In Indonesia, the development of digitizing public services is contained in Presidential Regulation Number 95 of 2018 concerning Electronic-Based Government Systems. SPBE is aimed at realizing clean, effective, transparent, and accountable governance as well as quality and reliable public services. The governance and management of the electronic-based government system nationally is also needed to improve the integration and efficiency of the electronic-based government system.

To support this, modern office technology has developed a new work climate. The new work climate in the company is influenced by the use of Information and Communication Technology (ICT), which can facilitate some office work. One of them is the development of an e-archive system at the Kupang Regency Population and Civil Registration Service on the grounds that technological advances have developed so rapidly that the appearance and structure of the service must be adjusted or harmonized to be in line with Law Number 24 of 2013 concerning Amendments to Law Number 23 of 2006 concerning Population Administration. The ease in managing the recording and publishing of population documents is expected to stimulate the public to be more orderly in their population administration.

Therefore it is necessary to develop an e-archive application at the Kupang Regency Population and Civil Registration Service to facilitate the search for population and civil registration documents at the Kupang Regency Population and Civil Registration Service, which consists of 4 fields, namely the Civil Registration Service Sector, the Population Registration Service Sector, and the Civil Registration Service Sector and Management of Population Administration Information (PIAK) as well as the Field of Data Utilization and Service Innovation.

So far, population documents and civil records have been archived manually. If at any time you need archival documents due to repairs, problems in the Police or the Court, the data must be searched manually, so it takes a long time, so the development of e-archives will save time and effort in searching documents. Archives that are stored manually require a large enough storage space. The archive storage area must also be managed in such a way that in the event of a flood and fire, the archived documents are kept in a safe condition. In addition, manual archive handling requires periodic maintenance so that archived documents can still be used when needed.

In their activities, the staff of the Population and Civil Registration Office of Kupang Regency has been managing tens, hundreds, to thousands of documents conventionally. Staff of the Department of Population and Civil Registration of Kupang Regency received many documents and also made documents for various purposes. Every document received and created is always stored in the filing cabinet. In addition to storage activities, staff from the Kupang Regency Population and Civil Registration Service also conducts search activities. In practice, there are many obstacles, including difficulty in finding documents, limited office space for document storage, and loss of original documents. When using an electronic document storage system, there is no need to think about storage space and document search because in digital archives (e-archives), document storage can be said to be unlimited, the limited storage capacity depends on the purchasing power of the Kupang Regency Population and Civil Registration Office. in the procurement of servers and hard disks used as archive storage media.

The archive storage system of the Department of Population and Civil Registration of Kupang Regency has been using the manual method so that it is not efficient and effective in terms of space, time, and cost. Manually managed archive rooms/places require equipment such as filing cabinets, folders, shelves, and others

The population administration recording system at the Kupang Regency Population and Civil Registration Service which is still manual takes a long time, because it is not neatly administered. The costs involved in

manually storing archives are expensive to buy/spend on expensive archival equipment, thus requiring archival care and maintenance.

As time goes by with the development of Information and Communication Technology (ICT), the archive system is designed to be computer-based (Agus and Teguh, 2005:34). This system has the advantage of a simpler design and does not require a long time in searching archives (Erhans and Muliawan, 2007:16). Therefore, the Kupang Regency Population and Civil Registration Office developed an update in archive management, namely the digitization of archives and called the e-archive application.

The development of archive digitization is useful for converting conventional archive forms into electronic or digital forms. Archive digitization is carried out as an effort to save information for the future. The reason for the Kupang Regency Population and Civil Registration Office in carrying out digitalization activities is to save birth certificate archives by physically backing up archives and their information content from the threat of damage and loss, thus making archives safer and more protected, in addition to speeding up archive retrieval so that employees can use their working time more effectively. This needs to be done immediately so that it is in accordance with the Regulation of the Minister of Home Affairs Number 104 of 2019 concerning Documentation of Population Administration.

Every organizational activity, whether it is a government or private organization, cannot be separated from the scope of administration, because it is an inseparable unit. Therefore, organizations must organize their archives. Archival issues have not been fully considered by the general public, government organizations or private organizations. Many people are still not aware of the importance of archives, so that when there are archives they have not been managed properly (Sularso, 2011: 8). Archives can be optimally useful for the organization if they are managed in an orderly and orderly manner, but on the contrary if the archives are managed in an orderly manner it will cause problems for an organization (Martono, 1990:45). Archives that have no use value, but are still stored make the office (workspace) uncomfortable, resulting in an unproductive work atmosphere.

The use of information systems in public services, especially in the development of e-archive applications, is useful to reduce costs, improve communication, and reduce time to complete activities related to staffing (Beadless, Lowery and Johns, 2005).

Archives are considered as national identity and identity that must be managed and saved by the state. One form of saving conventional archives is to convert archives in digital form according to PP 95 of 2018 concerning Electronic-Based Government Systems (SPBE). There are two purposes that digitization can serve. First, easy access to dynamic archives, archive availability for open access. Second, the purpose of preservation from conventional to digital forms and vice versa because the goal is to store it in several media so that the information is not lost.

In the era of the industrial revolution 4.0, simultaneous and continuous readiness is needed to change the service system to be faster and more accurate through digitalization so that good archiving services will avoid deceitful practices, namely deceitful and dishonest practices. So that the public is not treated to trapping data and information, information that is not actually in public services. Archives are the spirit of all aspects of individual and organizational life. Archives must be managed in the principles of democracy or open governance and the Kupang Regency Population and Civil Registration Office must be transparent in managing archives with a three-dimensional approach, namely the past, present and future.

In this digital era, people want fast-paced public services, including administrative data services (population administration). Through fast-paced and uninterrupted service, the standard of service provided is able to provide happiness to the community. Fast and safe service is also a key factor that brings about a change in the paradigm of public service in the administration sector so that people can be served from anywhere.

Based on the descriptions of the problems above, the authors want to examine the Development of Archive Digitization to Improve Public Services at the Kupang Regency Population and Civil Registration Service.

LITERATUR REVIEW

New Public Service

In general, the flow of the NPS concept is against and against the previous paradigms (OPA and NPM). The theoretical basis of the NPS paradigm was developed from the theory of democracy. By more appreciating differences and diversity as well as participation and rights as citizens, in substance in this new perspective is; "a set of ideas about the role of public administration in the governance system that place public service, democratic governance and civic engagement at the center (Saefullah, 1999:24)."

In this public administration perspective, the New Public Service (NPS) explains that there is a change in the orientation of citizens (citizens), the values that are put forward, and the role of government. Citizens (citizens) should be placed at the forefront and the emphasis should not be on distinguishing between directing and pacing but how to build public institutions based on integrity and responsiveness.

In the NPS, the concept of public interest is the result of the agreement of various values that exist in society. Values such as fairness, transparency, credibility and accountability are values that are upheld in public services. The NPS paradigm holds that bureaucratic responsiveness is more directed to citizens, not to clients, constituencies and not customers.

Public administrators are required to involve the community (since the planning, implementation, and evaluation processes) in government and other public service tasks. The aim is to create a better government, in accordance with the basic values of democracy, and prevent potential violations of democracy.

Around the world, every government aims to transform public administration in order to adapt to the changing environment and overcome social challenges. Transformational goals include realizing organizational change beyond improving the delivery of services to citizens, facilitated by the use of information technology to create public value (GerryStoker,2006) and increase the responsiveness and openness of the government (JRamonet all, 2016, Millard, 2015). The essence of the idea of public value creation is to reflect the ongoing shift in social values as well as in the collaboration of various stakeholders (Mark, 1995). Thus it can be seen in accordance with the context of the broader shift from a form of government bureaucracy to a form of government network (Klievinket al, 2016) that aims to enable greater accountability of public administration (Stoker, 2006). Digital governance is considered a facilitator or even a driver of this transformation (Frank & Conolly, 2016).

Digital governments pay attention to the use of information technology to improve government operations and serve their citizens. In practice, this is often realized through the digitization of public services, referred to as public electronic services (Ida and Gabriella, 2013), and related changes to the organization (Anne, 2011). Despite the lofty ambitions that drive government initiatives to digital, such as the development of public electronic services, it is often difficult to see what transformation is actually made possible by the implementation of digital governments (Cordella and Bonina, 2012).

In the general discourse on the development of digitalization in the public sector, digital governance is considered a facilitator or even a driver of transformation (Cordella and Bonina, 2012). One form of digitalization of public services is the application of e-archives to population services and Civil Registration in Kupang Regency. The Kupang Regency Government seeks to update the population administration system and Civil Registration followed by the development of the times, especially in the digital era.

In other words, the role of the government is one of them is to ensure that the public interest is truly dominant, that both the solution and the process of developing solutions to public problems are in accordance with democratic norms and values in the form of justice, honesty and equality. One of the core principles of the new public service is the re-strengthening of the centrality of the public interest in government services. The new public service demands that the process of establishing a vision for society not only be left to a separated political leader or appointed public administrator (Denhardt & Denhardt, 2003: 112).

Therefore, this research rests on the assumption that the development of digitalization of archives for the improvement of public services in the Kupang Regency Population and Civil Registration Office allows the transformation of the public sector through the creation of public value which according to the Harvard JFK School of Government (in Indrajit, 2006: 13-15) that there are three elements of successful implementation of e-government that must be owned and considered really are elements; (a) Support, (b) Capacity and (c) Value.

E-government

E-government began to be introduced in public institutions towards the end of the 20th century precisely in the late 1990s. Information technology is developing in Indonesia but its implementation in government agencies began since the issuance of policies in 2001 through Presidential Instruction No. 6 of 2001 on Telematics (Telecommunications, Media and Informatics) which states that government officials must use telematics technology to support good governance and accelerate the democratic process. Furthermore, the issuance of Presidential Instruction No. 3 of 2003 on National Policy and Strategy for E-government Development which is a clear proof of the Indonesian government to improve the quality of public services through E-government.

Supriyadi, 2004, mentioned one of the prominent characteristics in the era of advances in communication and information technology is the use of computer-government technology is the use and utilization of information technology by the government to create communication between the government, society, the business world

and other interested parties to provide services quickly and precisely. In summary, the purpose of e-government is to improve communication networks among the public, private sector, and other governments that can facilitate interaction, transactions and services. The concept of e-government first developed in America in 1993 (Gronlund, 2007: 364), while the concept of internet use in government began to be identified since the 1970s (Gronlund, 2007: 364).

E-government stands for electronic government. E-government is one form or model of government system based on the power of digital technology, where all administrative work, service to the community, supervision and control of resources belonging to the organization concerned, finance, taxes, levies, employees and so on are controlled in one system. E-government is a new development in order to improve public services based on the use of information and communication technology so that public services become more transparent, accountable, effective and efficient. According to The World Bank Group (Suaedi and Wardianto 2010: 54), E-government is an effort to use information and communication technology to improve efficiency and effectiveness, transparency and government accountability in providing better public services.

Rianto et al (2012: 36) concluded that e-government is a form of application for the implementation of tasks and governance using telematics technology or information and communication technology. The e-government application provides opportunities to improve and optimize relations between government agencies, the relationship between the government and the business world and the community. The mechanism of the relationship is through the use of information technology which is a collaboration or merger between computers and communication network systems. Indrajit (2006: 36), emphasized that e-government is a new mechanism of interaction between the government and the community and other interested people, involving the use of information technology (especially the internet) with the aim of improving the quality (quality) of service.

E-government is the implementation of electronic-based government to improve the quality of public services efficiently, effectively and interactively. Where in essence e-government is the use of information technology that can improve the relationship between the government and other parties (residents, entrepreneurs, and other agencies). Wibawa (2009: 114), defines e-government is a public service organized through a government website where the domain used also shows the domain of the Indonesian government.

E-government is a form of service application that can improve the quality of public services based on technology and communication to answer the demands and needs of the public who want a fast data processing process and the right information. While Wardianto (2010: 54) stated that e-government as an effort to use information and communication technology to improve efficiency, effectiveness, transparency, and government accountability in providing better public services. E-government should be viewed as a means not as a goal. In order for the implementation of e-government to be carried out properly, it is necessary to pay attention to technical and non-technical factors that can affect success. In general, non-technical factors are more domain than technical factors, therefore a deep understanding of non-technical factors is needed when designing and implementing e-government. The implementation of e-government which is associated with efforts to meet the needs of all sectors of activities both in government and society requires patrons from leaders who can provide example and mutual commitment. According to the World Bank (Wibawa 2009: 113) e-government is the use of technology by government agencies such as wide area networks (WAN) internet, mobile computing, which can be used to build relationships with the community, the business world and other government agencies.

The development of e-government in a country according to Layne and Lee (Wahid, 2008: 39) can be reviewed from several stages of evolution, namely starting with the presence of the government in the form of a web that provides basic and relevant information for the public. The term e-government, like other e-business terms, has the risk of being overexploited, making it ambiguous. This relatively simple article tries to correct the wrong perception of e-government while exploring in more detail the concept of e-government itself. Furthermore, this article invites readers to look at the obstacles and obstacles faced by developing countries such as Indonesia in implementing this concept and offer several temporary solutions that are considered appropriate this is in line with Yusriadi et al statement, (2018) that e-government as a whole will improve good relations between government, corporations and society, thus increasing transparency, control, accountability, effectiveness and efficiency of government organizers and create a new government environment that is able to answer various problems faced as a result of global change. trend. Through e-government, people can also more easily interact with the government, which can create open and democratic public policies and services.

From some of the above definition can be stated by (Indrajit, 2006: 5) that there are three characteristic similarities of each definition of electronic government (e-government), namely: First, is a new (modern) interaction mechanism between the government and the community and other interested circles (stakeholders).

Second, it involves the use of information technology, especially the internet. Third, the goal to be achieved is to improve the quality or quality of service to the community.

E-government involves the use of communication and information technology to facilitate interaction between government and society, business, and between government units (Joseph, 2013). The initiative to implement e-government in Indonesia was introduced through Presidential Instruction No. 6 of 2001 on Telemetric to support good governance and accelerate the democratic process (Karunasena and Deng, 2011). Thus, the implementation of e-government aims to facilitate and improve transactions between public services and the community.

In most major cities in developing countries, political parties have sought to promote the dynamic development of e-government (Álvarez et al., 2010; and Rodríguez et al., 2011). But in Indonesia, most of the implementation of new e-governments at the publication stage through the website. In 2014, 369 government offices had created their own websites, but 24% of those websites failed to manage properly due to budget constraints, and only 85 sites operated with complete choice. E-government is not just a website publication, but the delivery of services to the full phase of electronic delivery services is also necessary for the success of good governance (Nam, 2014).

Regarding the effects of e-government, former Presidents of the USA and The United Kingdom, Al Gore and Tony Blair (Organ, 2003; Joint, 2005) states that the advantages of its implementation are to improve the quality of government services for stakeholders to improve transparency, control and accountability of governance to implement the concept of good governance, to reduce total administrative costs, to obtain new sources of income through their transactions with interested parties, to create a new community environment in line with global changes and trends that are there are; and empowering communities and government partners in the public policy-making process.

Today, in contrast to developed countries where e-government is well established, there are many challenges for the implementation of e-government in developing countries. These challenges include a large digital divide, inadequate infrastructure, and a lack of skills and competencies for the design, implementation, use, and management of e-government systems. (Twizeyimana, J.D, 2017).

Digitalization in Public Service

Around the world, every government aims to transform public administration in order to adapt to the changing environment and overcome social challenges. Transformational goals include realizing organizational change beyond improving the delivery of services to citizens, facilitated by the use of information technology to create public value (Gerry Stoker, 2006) and increasing government responsiveness and openness (JRamonet all, 2016, Millard, 2015). The essence of the idea of public value creation is that it reflects the ongoing shift in social values as well as in the collaboration of various stakeholders (Mark Harrison Moore, 1995). Thus it can be seen in accordance with the context of the broader shift from the form of government bureaucracy to the form of an appluri, a form of government network (Klievink, 2016) that aims to allow greater accountability of public administration (Stoker, 2006). Digital governance is considered a facilitator or even a driver of this transformation (Frank & Conolly, 2016).

Digital governments pay attention to the use of information technology to improve government operations and serve their citizens. In practice, this is often realized through the digitization of public services, referred to as public electronic services (Ida and Gabriella, 2013), and related changes to organizations (Anne Fleur et al, 2011). Despite the lofty ambitions that drive government initiatives to digital, such as the development of public electronic services, it is often difficult to see what transformation is actually made possible by the implementation of digital governments (Cordella and Bonina, 2012).

Digital governments are often concerned with the digitization of services and the development of public electronic services (Aril and Svein, 2016), although also initiatives such as electronic participation and open data are increasingly prominent. Public electronic services can be understood as electronically mediated services, provided by public organizations, where users (citizens and businesses) and supplier organizations collectively create value through the consumption of services by users (Ida Lindgren and Gabriella Jansson, 2013). Public electronic services are heavily influenced by those embedded in a particular organizational context and therefore should not be understood as mere web pages. In short, the digitization of public services is more than just developing information technology. This is an example of organizational reform. Thus, efforts to digitize public services typically affect many stakeholders, often in different parts of government and society (Oystein, 2011).

Thus, in order to achieve the fundamental mastery of government required, the development of public services is made possible by organizational change or organizational reform (Anne Fleur et al., 2011). The development of public e-services or the subsequent digitization of public services is associated with many challenges, such as understanding the needs and expectations of users (William et al., 2015), involving stakeholders in various phases of development (Jesper and Fredrik, 2014), and performing often contradictory maneuvers and ambiguous organizational contexts in which economic and democratic values need to be considered (Ida Lindgren and Gabriella Jansson, 2013).

When looking at the digitization of public services as a means to create public value, several aspects become important. First, an ongoing assessment of what constitutes value requires a decision-making process involving different stakeholders, especially prospective users (co-creation) of the public, private and civil sectors (William et al., 2015).

Fast, easy, affordable, and quality services are an obligation that must be done by the government to the community. To realize this, it is necessary to transform public services towards digital to accelerate and facilitate services. Digitalization of public services is inevitability in an effort to increase transparency and improve the quality of service to the community. Electronic service is a must. But it must also be noted that the products produced are safe, accurate, and the standard of service is correct. In the general discourse on digitalization in the public sector, digital governance is considered a facilitator or even a driver of transformation (Cordella and Carla, 2012).

In other words, the role of the government is one of them is to ensure that the public interest is truly dominant, that both the solution and the process of developing solutions to public problems are in accordance with democratic norms and values in the form of justice, honesty and equality. One of the core principles of the new public service is the re-strengthening of the centrality of the public interest in government services. The new public service demands that the process of establishing a vision for society not only be left to a separated political leader or appointed public administrator (Denhardt & Denhardt, 2003: 112). In line with that argument, then the government's bureaucratic reform policy must continue to experience a trend of refinement, especially in the reform era, where one of the targets of reformasi is a change to serve the needs of the community in accordance with the standardization of public services based on policies issued by the government.

This is in line with gede Sandiasa's opinion (2018) stating that bureaucratic reforms are implemented to improve the quality of local government public services, encouraging public participation and trust in local governments. Thus the acceleration of development in the region in an effort to achieve community welfare, can be realized through the participation of various stakeholders in the region, by paying attention to the potential and values developed in the region, towards the implementation of responsive, productive and accountable development programs.

RESEARCH METHODOLOGY

The method used in research on the development of digitalization of archives for the improvement of public services in the Kupang Regency Population and Civil Registration Office is a qualitative research method, with a case study approach. This research will be carried out in August to September 2021 at the Kupang Regency Population and Civil Registration Office. The informants numbered 23 people with the following details:

1. Head of Population and Civil Registration Office of Kupang Regency
2. Head of Civil Registration Service of The Population and Civil Registration Office of Kupang Regency
3. Head of Population Registration Services of The Population Registration and Civil Registration Office of Kupang Regency
4. Head of Population Administration Information Management (PIAK) of the Kupang Regency Population and Civil Registration Office
5. Head of Data Utilization and Innovation of The Civil Population and Registration Office of Kupang Regency
6. Managing technician / maintenance e-archive of the Kupang Regency Population and Civil Registration Office
7. The people of Kupang Regency as recipients of e-archive services at the Kupang Regency Population and Civil Registration Office.

The types of data in this study are Qualitative Data and Quantitative Data while The data sources in this study come from primary data sources and secondary data while the data collection methods in this study are Field Research, Literature (Library Research) while data collection techniques in this study are Observations, Qualitative Interviews and Qualitative Documents.

In analyzing the data, the data obtained by researchers using data analysis techniques put forward by Bungin (2012: 70), namely as follows:

1. Data Collection

Data collection is an integral part of data analysis activities. Data collection activities in this study are by using interviews and documentation studies.

2. Data Reduction

Data reduction, interpreted as the selection process, focuses attention on simplification and transformation of abusive data that arises from written records in the field. Reduction is done since data collection begins with making summaries, coding, searching themes, creating clusters, writing memos and so on with the intention of setting aside irrelevant data / information.

3. Display Data

Data display is the description of a set of composed information that provides the possibility of drawing conclusions and taking action. The presentation of qualitative data is presented in the form of narrative text. The presentation can also take the form of matrixes, diagrams, tables and charts.

4. Conclusion Drawing and Verification

It is the final activity of data analysis. Draw conclusions in the form of interpretation activities, namely finding the meaning of the data that has been presented.

RESEARCH AND DISCUSSION RESULTS

Development of Digitalization of Archives for Improvement of Public Services in the Population and Civil Registration Office of Kupang Regency

In meeting the demands of society in line with the democratization and development of global technology is the performance of public services that are more efficient, fast-paced, transparent, communicative and computerized. Transformation or in other words innovation is certainly one thing that we must always improve over time. In the government system of the Republic of Indonesia, there have been many transformations to existing challenges, such as the integrity of the State Civil Apparatus (ASN) which is often questioned so that this becomes a challenge for state officials to focus on improving services to the community and continue to improve government patterns.

In the world of technology, many countries have changed everything from the way humans work so that communicating and the use of IT or the Internet of things encourages the world to try to change the mode of service. Therefore, the government is required to move quickly in responding to the needs of the community progressively by implementing an Electronic-Based Government System (SPBE). Globally, Indonesia's SPBE index increased from 107th in 2018, now rising to 88th place. This is an excellent improvement in the implementation of digital transformation in Indonesia.

The development of digitalization of public services is stated in Presidential Regulation No. 95 of 2018 concerning Electronic-Based Government Systems. SPBE is aimed at realizing clean, effective, transparent, and accountable governance and quality and reliable public services. Governance and management of electronic-based government systems nationwide is also needed to improve the cohesiveness and efficiency of electronic-based government systems.

One of the models of SPBE development is the application of e-archives to the Kupang Regency Population and Civil Registration Office on the grounds that technological progress has developed so quickly that the appearance and structure of the service must be adjusted or harmonized to be in line with Law No. 24 of 2013 concerning Amendments to Law No. 23 of 2006 concerning Population Administration. Ease in the management of recording and publishing population documents is expected to stimulate the community to be more orderly population administration.

Therefore, it is necessary to develop the digitization of archives at the Kupang Regency Population and Civil Registration Office for the improvement of public services and to analyze this, the author uses the results of the Harvard JFK School of Government study (in Indrajit, 2006: 13-15) that there are three elements of successful

implementation of e-government that must be owned and considered really, namely elements; (a) Support, (b) Capacity and (c) Value with the following details:

1. Elemen Support

There is a desire (intent) or political will from among public and political officials to really apply the concept of digitization of archives to the Kupang Regency Population and Civil Registration Office for the improvement of public services. What is meant by support here are:

a. The agreement on the framework for the digitization of archives at the Kupang Regency Population and Civil Registration Office

The framework for the digitization of archives for the improvement of public services as one of the keys to regional success in achieving the vision and mission of the region, so it must be given high priority as other keys to success are treated.

Based on the results of the author's research, it was found that the framework for the digitization of archives for the improvement of public services as one of the keys to regional success in achieving the vision and mission of the region has become the agenda of the Kupang Regency Government and is currently preparing a master plan for electronic-based government systems (SPBE), while continuing to disseminate information so that the people of Kupang regency are more literate in information technology to be in line with vision ke (4) the four Kupang Regency Governments are; The realization of good governance due to efforts to digitize public services needs to affect many stakeholders in various parts of government and society (Axelsson et al, 2013).

In its activities, the staff of the Kupang Regency Population and Civil Registration Office has managed tens, hundreds, to thousands of documents conventionally. Staff of the Kupang Regency Population and Civil Registration Office received documents and also made documents for various purposes. Any documents received and created are always stored in an archive storage cabinet. In addition to storage activities, staff of the Kupang Regency Population and Civil Registration Office also conducted search activities. In practice, many obstacles are faced, including difficulty in the search for documents, limited office space for document storage, to the loss of original documents. If using the document storage system electronically, then there is no need to think about the storage space and search for documents because in digital archiving (e-archive), document storage can be said to be unlimited, the limitation of storage capabilities depends on the purchasing power of the Kupang Regency Population and Civil Registration Office in the procurement of servers and hard disks used as archive storage media.

The archival storage system of the Kupang Regency Population and Civil Registration Office has been using manual methods so that it is not efficient and effective in terms of space, time, and cost. Manually managed archive space / place require equipment such as filling cabinets, folders, shelves, and others.

The population administration recording system in the Kupang Regency Population and Civil Registration Office which is still manual takes a long time, because it is not neat in its administrating. The costs needed in manual archival storage require expensive costs to buy / spend the needs of expensive archival equipment, so it requires maintenance and maintenance of archives.

Over time with the development of Information and Communication Technology (ICT), the archival system was designed with a computer-based (Agus and Teguh, 2005: 34) also carried out at the Kupang Regency Population and Civil Registration Office. This system has advantages in simpler design and does not take long in archival search (Erhans and Muliawan, 2007: 16). Therefore, the Kupang Regency Population and Civil Registration Office developed an update in archive governance, namely the digitization of archives and called the e-archive application.

The development of digitalization of archives is useful for changing the form of conventional archives into electronic or digital forms. Digitization of archives is carried out as an effort to save information for the future. The reason for the Kupang Regency Population and Civil Registration Office in carrying out digitization activities is to save the birth certificate archive by backing up the archive physically and the contents of the information from the threat of damage and loss, thus the archive becomes safer and protected, but also to speed up the re-meeting of the archive so that it can use the employee's work time to be more effective. This needs to be done immediately in accordance with the Regulation of the Minister of Home Affairs Number 104 of 2019 concerning The Documentation of Population Administration.

It can be stated that the desire (intent) or political will from among public and political officials to really apply the concept of digitization of archives in Dukcapil Kupang Regency already exists but in the level of implementation, the political will has not been carried out both in terms of policy as a legal and technical

umbrella for implementation which according to Milard (Voorberg et al 2015) that The development of e-services services has always been constrained by many challenges such as understanding user needs and expectations, involving stakeholders in various phases of development (Holgersson and Karlsson, 2014) and in an organizational context that is often contradictory and ambiguous in a context where the value of resource availability (people, means and money) needs to be considered (Lindgren and Jansson, 2013) while the purpose of using information technology in public services is to create public value (Stoker, 2006) and increase government responsiveness and openness (Banister and Connolly, 2014).

Therefore, the Kupang Regency government is required to move quickly in responding to the needs of the community progressively by implementing an Electronic-Based Government System (SPBE) through the realization of archives in Dukcapil Kupang Regency. Globally, Indonesia's SPBE index increased from 107th in 2018, now rising to 88th place. This can help governments become not only more efficient and effective, but also more open, transparent, and accountable to their constituents (OECD, 2016).

b. The location of a number of resources (human, financial, energy, time, information and others) at every level of government to build this concept (such as the existence of clear Laws, and Government Regulations, the assignment of special institutions, the main person in charge, the drafting of rules of cooperation with the private sector, and so on)

Based on the results of the interview, it is known that in the development of digitalization of archives through the implementation of e-archives in Department of Population and Civil Registration Kupang Regency has not been supported by a number of adequate resources such as humans who only number 4 people, namely honorary employee 2 people, civil servants as staff 1 person and Head of Section 1 people, without financial support because of using the personal money of Department of Population and Civil Registration employees and even policy support at the Kupang Regency level.

In its journey, the creation of this e-archive application is the result of cooperation with the private sector with the allocation of budgets from the region in 2018. Along the way, this application is problematic, because there is a difference in understanding with third parties where according to the understanding of the Kupang Regency Department of Population and Civil Registration the application was purchased broke but the understanding of the 3rd party is to rent the application so that the application does not run.

Only in early 2021 this application was redesigned by asking for the help of one of the lecturers of Artha Buana Kupang College of Computer Science to make at a pure cost from an apparatus of the Department of Population and Civil Registration of Kupang Regency and in mid-October 2021 this e-archive application has begun to be used in the office and only in 2023 will be budgeted funds for its development.

Digitization of archives through e-archives is an initiative of the Kupang Regency Department of Population and Civil Registration apparatus because it is felt that over time with the development of Information and Communication Technology (ICT) then the archival system must be designed with a computer-based (Agus and Teguh, 2005: 34). This system has advantages in a simpler design and does not take a long time in the search for archives (Erhans and Muliawan, 2007: 16) therefore the Kupang Regency Population and Civil Registration Office developed an update in archive governance, namely the digitization of archives and called the e-archive application.

Although the lack of human resource support, budget and policy and without the drafting of the rules of cooperation with the private sector but in its development, the digitization of archives through e-archives is considered very useful to change the form of conventional archives into electronic or digital forms in Department of Population and Civil Registration Kupang Regency. Even without adequate resource support, the development of digitalization in Department of Population and Civil Registration Kupang Regency archives is still carried out individually as an effort to save information for the future such as to save birth certificate archives by physically backing up archives and the contents of their information from the threat of damage and loss, thus archives become safer and protected, but also to speed up archival re-meeting so that they can take advantage of Employee work time becomes more effective.

c. The socialization of the concept of digitizing archives at the Kupang Regency Population and Civil Registration Office for the improvement of public services evenly, continuously, consistently, and thoroughly to all bureaucrats in particular and the public in general through various sympathetic campaign ways.

Based on the results of interviews and observations conducted by the author, it is known that in its development, the digitization of archives through e-archives in the Kupang Regency Population and Civil Registration Office has not reached the stage of socialization to the general public and the scope of the Kupang Regency Regional

Government organization on the grounds that it is still under development but consultations are still carried out together with the Archives Office and the Director General of Population Jakarta and the Programmer Party as digital archive application maker. At least socialization is carried out internally at the Kupang Regency Population and Civil Registration Office.

The lack of socialization related to the development of digitalization of public services through e-archives is biased when juxtaposed with the theory of new public service because the new public service demands that the process of determining the vision of developing digitalization of public services through e-archives for the community is not only handed over to elected political leaders or appointed public administrators (Denhardt & Denhardt, 2003: 112) but public administrators must involve the public (since the process of planning, implementation, and evaluation) in government and other public service tasks. The goal is to create better governance, in accordance with the basic values of democracy, as well as prevent potential violations of democracy aimed at enabling greater accountability of public administration (Gerry Stoker, 2006) because efforts to digitize public services need to influence many stakeholders in different parts of government and society (Axelsson et al, 2013).

As an additional reference, Law No. 25 of 2009 concerning Public Services, there are 14 components in service standards that become benchmarks in the implementation of public services. These components are divided into two, namely service delivery and manufacturing. Service delivery components in the context of developing digitalization of public services through e-archives must be compiled and published, namely requirements, procedures, settlement periods, fees / tariffs, service products, and complaint handling. While the manufacturing component must be prepared, but not mandatory to be published, namely the legal basis, infrastructure, implementing competence, internal supervision, number of implementers, service guarantees, service security and safety guarantees, and evaluation of implementing performance. "This standard of service is what becomes the soul or spirit in providing service to the community"

In the context of e-government as the basis for the development of digitalization of public services through e-archives, the use of information technology that can improve relations between the government and other parties (residents, entrepreneurs, and other agencies) Wibawa (2009: 114) needs to be disseminated. The socialization of the development of digitalization of public services through e-archives in its application is expected to reduce corruption, increase transparency and time efficiency, increase revenue, and reduce costs (Krishnan et al., 2013; and Lupu and Lazăr, 2015).

2. Capacity Element

Element Capacity is an element of ability or power from the local government in realizing the dream of digitizing archives at the Kupang Regency Population and Civil Registration Office to improve public services into reality. There are three things that the government must have in relation to this element, namely:

- a. Availability of sufficient resources to carry out the sharing of archive digitization initiatives at the Kupang Regency Population and Civil Registration Office for the improvement of public services, especially those related to financial resources

Based on the results of interviews and observations conducted by the author, it was found that the availability of sufficient resources to carry out the sharing of archival digitization initiatives at the Kupang Regency Population and Civil Registration Office for the improvement of public services, especially those related to financial resources, was constrained by inadequate budget allocation and ineffective planning and utilization.

This can happen due to a misapprehension that has an impact on the utilization of inappropriate budget allocations where in 2018 e-archive applications are made by third parties; money has been paid at the time the application is in the trial stage. At the end of the trial and when the software is to be picked up by Department of Population and Civil Registration Kupang Regency, the third party wants the e-archive to be installed on a third-party server and every year must be subject to a host rental so that it has an impact on the swelling rental budget from the financial side. Another impact is that if the application is installed on a third-party server, it will have an impact on all population archive data automatically held by third parties while population data is confidential data that if misused will harm many parties. The point is that at that time there were mistakes in planning from the financial side to the planning and implementation of e-archive development in Department of Population and Civil Registration Kupang Regency. Because there is such a difference of opinion, the third party wants to return the state money while the old Head of the Department of Population and Civil Registration Office does not agree with many unreasonable reasons.

The findings indicate that financial resources that are not planned and implemented effectively will have an impact on the failure of a program. The success of a program depends largely on the ability to utilize policy resources available to facilitate implementation activities and financial resources become important calculations in the success of policy implementation, Inadequate budget allocation and ineffective budget planning and utilization. In the development of digitalization of archives through e-archives in Department of Population and Civil Registration Kupang Regency or the lack and limited funds or incentives in policy implementation is a major contribution to the failure of policy implementation (Van Meter and Van Horn, 1974: 465).

Agreeing with Van Meter and Van Horn, Goggin et al (1990: 31) stated that one of the criteria for measuring the success of policy implementation is the amount of funds allocated, assuming that the greater the amount of funds allocated, the more seriously the policy is implemented. However, in Department of Population and Civil Registration Kupang Regency, inadequate budget allocation and ineffective planning and utilization of budgets also hindered its role in carrying out the development of digitalization of archives through e-archives in Department of Population and Civil Registration Kupang Regency.

b. The availability of adequate information technology infrastructure because this facility is 50% of the key to the successful implementation of the concept of digitization of archives in the Kupang Regency Population and Civil Registration Office for the improvement of public services.

Based on the results of interviews and in-depth observations conducted by the author, it is known that the availability of adequate information technology infrastructure in supporting the development of digitalization of archives through e-archives in the Kupang Regency Department of Population and Civil Registration Office must consist of hardware that includes physical equipment such as computers and printers consisting of 1 unit Laptop, 3-unit PC, 2-piece printer, Software (software) or program is a set of instructions that allow hardware to be able to process data until now is still being developed together with one of the lecturers of STIKOM Artha Buana Kupang. The procedure is a set of rules used to realize data processing and generating the desired output is also still in the development stage, databases related to data storage are being planned to be held in 2023 while for computer networks and data communication: a connecting system that allows resources to be used jointly or accessed by a number of users has not been where the Kupang Regency Department of Population and Civil Registration Office when trying to using the e-archive application using the Kupang Regency Infokom Office server. The Kupang Regency Department of Population and Civil Registration Office does currently have a server but not a special e-archive server while the instructions of the Director General of Department of Population and Civil Registration that specifically for adminduk applications, should not be joined by e-archive applications so that we are seated on the server of the Infokom Office and planned in 2023 to procure a special server e-archive Office Department of Population and Civil Registration Kupang Regency so that it can be stated that the availability of information technology infrastructure in supporting the development of digitalization archives at the Kupang Regency Population and Civil Registration Office for the improvement of public services have not been able to be declared successful.

c. The availability of human resources who have the competencies and expertise needed so that the implementation of digitalization of archives at the Kupang Regency Population and Civil Registration Office for the improvement of public services can be in accordance with the principle of expected benefits.

Based on the results of interviews and observations conducted by the author, it was found that the availability of human resources who have the competencies and expertise needed for the implementation of digitalization of archives through e-archives at the Kupang Regency Population and Civil Registration Office for the improvement of public services can be in accordance with the principle of benefits that are expected to not be fulfilled because it is still in the planning stage where Kasmir (2017:59) mentions human resource planning. It is systematically forecasting the demand and supply of future employees in an organization.

According to the results of the analysis of the internal needs of the Kupang Regency Department of Population and Civil Registration Office, what is needed is State Civil Apparatus with a Bachelor of Archival education background or at least Diploma 2 Archival and Strata One Computer or at least Diploma 3 Computer. Humans as the absolute most important element are analyzed and developed in this way. Time, energy and ability can really be utilized optimally for the benefit of the organization, as well as for the benefit of the individual. Abdurrahmat (2006:8). Analysis is necessary because the human resources needed are truly capable and responsible in the development of information systems, processing and use of e-archive information system outputs.

3. Value Element (Benefit)

The first and second elements are the supply side (service providers from the government, while the third element (Value) is an aspect that is reviewed from the demand side, the initiative to develop the digitization of archives at the Kupang Regency Population and Civil Registration Office for the improvement of public services will be useless if no party feels benefited by the implementation of the concept which in this case is the government and the community as a recipient of public service.

When looking at the digitization of public services as a means to create public value, an important aspect is the continuous assessment of the quality of services by involving different stakeholders, especially prospective users (co-creation) from the public, private and civil sectors (William et al, 2015) but in the findings of the authors it is known that the assessment of the benefits of developing digitalization of public services through e-archives in the Kupang Regency Department of Population and Civil Registration Office has not been felt by community with the findings that community service activities are still manual and not even on time and there are still scalpers in front of the service door.

The findings indicate the magnitude of the benefits obtained by the development of digitalization of archives at the Kupang Regency Population and Civil Registration Office for the improvement of public services is not among the government itself, but the community and those with an interest (demand side). For this reason, the government must be really careful in choosing what priorities must take precedence over its development in order to truly provide value (benefits) that are significantly felt by its people.

The purpose of digitalization is as an effort to preserve archives and also maintain accessibility so that it can provide the widest access for the community, in addition to the digitization of archives can be used for research, documentation and publication purposes (Sugiharto, 2010: 53). Wirajaya, et al (2016: 67) revealed that the digitization of archives is expected to be an alternative to archival rescue for the long term Sugiharto (2010: 54) said that the digitization process from paper form requires flatbed scanner equipment or camera sets on flatbed tables in addition to the benefits obtained by the Kupang Regency Department of Population and Civil Registration Office with the development of e-archives, among others, are improving the efficiency and operational effectiveness of government implementation in providing service to the community and stakeholders in need.

With the findings of the optimal development of digitalization of archives in the Kupang Regency Population and Civil Registration Office, it is hoped that it will encourage improvements in service quality and the most important thing is the occurrence of sense of citizenship among residents and citizen empathy for various difficulties faced by service providers (Suparto, 2006).

CONCLUSION

The development of digitization of archives at the Kupang Regency Population and Civil Registration Office for the improvement of public services and to analyze this, the author uses the results of the Harvard JFK School of Government study (in Indrajit, 2006: 13-15) that there are three elements of successful implementation of e-government that must be owned and considered really, namely element (a) Support with the finding that there are three elements of successful implementation of e-government that must be owned and considered really, namely element (a) Support with the finding that; (1) The framework for the digitization of archives at the Kupang Regency Population and Civil Registration Office where the Kupang Regency Government is still preparing a master plan for the Electronic-Based Government System (SPBE) to be in line with the 4th Vision of the Kupang Regency Government, namely; The realization of good governance (Good Governance) so that the development of e-archives is still constrained, (2) has not been allocated optimal resources (human, financial, energy, time, information and others) at every level of government to build this concept (such as the existence of laws, and clear government regulations, the assignment of special institutions, the main person in charge, the preparation of rules of cooperation with the private sector, and so on), (3) The concept of digitizing archives has not been socialized in the Kupang Regency Population and Civil Registration Office for the improvement of public services evenly, continuously, consistently, and thoroughly to all bureaucrats in particular and the public in general through various sympathetic campaign ways, (b) Capacity with the finding that: (1) the availability of resources from the financial side is not enough to carry out sharing initiatives to develop the digitization of archives in the Office Population and Civil Registration of Kupang Regency, (2) adequate information technology infrastructure in terms of hardware and software, the unavailability of human resources who have competence and expertise in the IT field, and (c) Value with findings has not been optimal development of digitalization of archives in the Office of Population and Civil Registration of Kupang Regency so that the benefits have not been felt by the office and the community.

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STUDY OF CAPACITY DEVELOPMENT ON THE PERFORMANCE OF LOCAL GOVERNMENT APPARATUS IN SABU RAIJUA DISTRICT

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ABSTRACT

Efforts to develop the capacity of the human resources of the apparatus aim to create local governments that have sustainable capacities in governance, so that improvements in public welfare can be achieved effectively and efficiently. The method used in this study is a qualitative research method, with a case study approach with 45 informants with the type of qualitative data and quantitative data while the data sources in this study came from primary data sources and secondary data while the data collection method in this study was research Field Research, while the Data Collection Techniques in this study are Observation, Qualitative Interviews and Qualitative Documents Further in analyzing the data, the data obtained by the researcher used the data analysis technique proposed by Bungin (2012:70) , Data Collection , Data Reduction , Data Display and Verification and Confirmation of Conclusions. The results of the study found that capacity building on the performance of local government officials in Sabu Raijua Regency, the author uses the theory proposed by Thompson (2003:60) where capacity development includes three levels of intervention,

Keywords: Development, Capacity, Local Government, Good Government and Performa

1. INTRODUCTION

Good governance is a set of processes that are implemented in organizations to determine decisions that are managed by a responsive and professional government in carrying out their government duties, especially in solving problems faced by the community . What are the problems that occur in people's lives with the attitude of being handled. In this case, the development and implementation of an appropriate, clear and real responsibility system is needed so that the administration of government can take place effectively, successfully and responsibly and free from corruption, collusion and nepotism (Uar, 2016). Such a government acts as a problem solver, not as a problem maker. Even a good government actually plays a role in preventing and avoiding problems. Unfortunately, the idea of good governance has not yet flourished in our local government apparatus. Bureaucracy in Indonesia has not developed to be more efficient, but on the contrary inefficiency, convoluted and many rules are not obeyed. The bureaucracy is required to be a public servant for the community, which has a role in regulating, serving, supervising, maintaining good relations between the government and the community (Rohayatin, 2017).

In line with the implementation of a decentralized system, where the government gives great authority to regions to carry out various government affairs. The implementation of decentralization is expected not only to reduce the burden of duties and responsibilities of the central government but also to increase the number and quality of public services so that public welfare can also increase (Kyriacou and Sagaes 2011; Baskaran 2011; Syurmita 2014).

For this reason, various efforts have been made to develop the capacity (capacity building) of the human resources of the apparatus. The goal is the creation of local governments that have sustainable capacity in the administration of government, so that improvements in community welfare can be achieved effectively and efficiently. Hindriks and Lockwood (2009) also found that the implementation of decentralization can improve the performance of regional heads with incumbent status in providing public services, and can make the government closer to the people.

So far, decentralization research in Indonesia has tended to focus on political, administrative and economic decentralization, for example studying the issue of regional expansion, by Tirtosudarmo (2008), Muqoyyidin (2013) and the issue of regional head elections, by Ritonga and Alam (2010). Several previous studies have tried to link decentralization and corruption, but the results are still inconclusive because decentralization is a complex multidimensional construct so that exploratory research used to measure the effectiveness of decentralization remains to be done (Fan et al ., 2009; Ivanyina and Shah 2011; Vu et al . , 2014; Choudhury 2015) one of which is the capacity building of local government apparatus in the era of decentralization, one of which is in Sabu Raijua Regency.

Sabu Raijua Regency is an Autonomous Region that was just formed in 2008 based on Law Number 52 of 2008 dated November 26, 2008, namely the expansion of Kupang Regency, East Nusa Tenggara Province where Sabu Raijua Regency is the 21st Regency in East Nusa Tenggara Province.

In order to improve the performance of local governments, the factor of developing the capacity of the apparatus becomes very urgent for one of the outermost districts in Indonesia . In addition to responding to the high demands of the community on the performance of local governments, capacity building of the human resources of the apparatus cannot be separated from the government's desire to carry out good governance which is directed to practice ideal governance.

Efforts to develop the human resource capacity of the apparatus in Sabu Raijua Regency have not been managed properly. This is shown, among others, by the difficulty of changing the mindset and workings of the apparatus, the low level of discipline and ethics of employees, a career system that is not fully based on work performance, an inadequate remuneration system for a decent life, recruitment that has not been carried out based on job performance. the required educational qualifications, the implementation of education and training (education and training) that have not been able to fully improve performance, and supervision that is still weak and not functioning optimally. As a result of these problems, the implementation of efficient and effective public services, namely fast, precise and transparent, has not been realized.

Allegations of the "craziness" of government officials in carrying out public service duties at local government offices have long been heard. They are labeled as only concerned with themselves rather than taking care of the interests of the citizens. They don't care about the complaints, problems, and aspirations of the people. Rules can be twisted at will, and easy procedures can be convoluted. Speed and accuracy of service is not their target, although the slogan "one day service" continues to be echoed. Deviations and waste often occur, as revealed every year from the findings of the Supreme Audit Agency (BPK) whose numbers are increasingly spectacular where the research results of Crook and Sverrisson (2001), Wu (2005) and Chene (2007) that the implementation of decentralization actually increases corruption in local government. Decentralization increases the number of corruptions in the regions that cause state losses which are smaller than the total losses to corruption that occur in the central government (Chene, 2007).

Actually, this criticism of the bad behavior of local government officials in Sabu Raijua Regency is not new, and this phenomenon does not only occur in Sabu Raijua Regency, in the United States there is an increase in bad behavior of local government officials, where many of them are involved in scandals such as waste, fraud and abuse of public trust (Steinberg and Austern, 1990). The disclosure of the ugliness of government officials is certainly not for crying out loud, but for finding solutions. Efforts to develop responsive and professional local government officials in overcoming community problems are a necessity in today's era of regional autonomy. If we don't go there, our local government will go bankrupt or be abandoned by the people.

In the administration of government in Sabu Raijua Regency, of course, it requires civil servants who have a high level of awareness of their obligations to become state officials who function as state servants and public servants. This is in accordance with the opinion of Nainggolan (1987:23) which says "The smooth implementation of government and national development mainly depends on the good and ideal of the state apparatus, the perfection of the state apparatus basically depends on the good and ideal of civil servants" Poor performance resulted in the government not running smoothly. This is in accordance with what is expressed by Osborne and Gaebler (1999: 182) which states that "many factors cause poor performance, including employee family background, education system, budget system and personnel system.

In this connection, according to Djohan (1997), there are at least two serious questions that we must discuss. First , how to form a figure of local government officials who care about community problems. Second , what can be done by local government officials so that community problems can be handled properly and to answer the first question, several aspects of the existence of government officials such as :

Employee recruitment, from where the government apparatus cadres come from, what is currently in effect does not guarantee the selection of the best candidates. Symptoms of nepotism, native sons, connections, and the use of pelican money are the main inhibiting factors. For this reason, a higher standard of requirements is needed, an attractive incentive model, an objective selection agency, more stringent examination procedures in the screening and screening process for prospective employees to be recruited. After the recruitment stage, a transition stage is needed before an employee gets official duties and responsibilities. For this reason, education about the ins and outs of government and civil service needs to be given in order to instill a strong commitment to service and service now with official education and pre-service programs that need to be perfected, including other education and training programs . At the same time , standard measures that can be used as an objective reference for career promotion need to be developed. Likewise, career planning and supervision of promotion provisions need to be carried out through a meritocratic approach.

Enactment of Law No. 23/2014 concerning Regional Government, concerning Regional Government, has an impact on the implementation of regional government, restructuring of regional government organizations, repositioning of employees, both central employees in the regions and regional civil servants themselves, as well as the re-actualization of (regional) government policies. For this reason, the principle of instructions for carrying out tasks and/or technical guidelines for the implementation of tasks from higher levels of government seems to be untenable. Considering that due to the implementation of regional autonomy, all levels of regional government are demanded and challenged with the word professionalism.

The professionalism of the government apparatus (regional) in Sabu Raijua Regency is marked by the implementation of tasks for the government apparatus in accordance with the demands of the reforms that are currently being rolled out. The professionalism of the government apparatus requires: 1) apparatus who master the concept (theory), and 2) apparatus that can implement these concepts (theory), so that local government apparatus can develop their duties as state servants and public servants.

The implementation of these functions is expected to be able to realize the concern of the government apparatus for its people, so that the community can feel the added value of the government apparatus. Therefore, the optimization of these functions will bring our society to the hope of equitable distribution of justice which can be used as a guide in creating community resilience, community independence, and community welfare.

With the reform, the people desire good governance, so that in turn the regional government system of Sabu Raijua Regency is run with a clean government system from elements of collusion, corruption, and nepotism.

1. LITERATURE REVIEW

2.1 Capacity Building

Capacity development or better known as capacity development or capacity building has various definitions. Grindle and Hilderbrand, (1995) define capacity building as improvements in the ability of public organizations, either single or cooperation with other organizations, to perform appropriate tasks. In other words, capacity building is an increase in the ability of public organizations to achieve certain goals, both independently and in collaboration with other organizations. Horton et al. (2003:71) which explains that capacity building is "an ongoing process to increase the ability of organization to carry out its functions and achieve its objectives, and to learn and solve problems". This concept describes capacity development as the ability to perform basic functions, namely goal achievement, learning and problem solving. This opinion is almost the same as that expressed by Milen (2000:47) who sees capacity building as a continuing process of strengthening of ability to perform core functions, solve problems, define and achieve objectives and understand and deal with development needs.

From several expert opinions, the study of capacity development is generally agreed upon in the area of individuals and organizations, although on a broader dimension there are slight differences. However, if examined closely, the system context (Brown, 2001), Morison, 2001, Araya-Quesada et al. (2010), community (Banyan, 2007), environment (OECD, 2008), Institutions (Grindle, 1997; Horton et al., 2003) have the same orientation, namely how individual and organizational dimensions can interact with the environment in developing their capacity, and The system and community are the organizational environment and individuals within the organization. Even on the dimensions of institutional reform (Grindle, 1997) which according to Dill (2000) has a focus on institutions and systems as macro structures. The Grindle concept is no different from that mentioned by Horton et al. (2003:31) with the concept of national institutions that affect the micro level (individuals and groups) or the meso level (organizations). At the micro level focusing on individuals and groups as a collection of individuals, capacity building focuses on providing professional and technical resources (Grindle, 1997; Dill, 2000; Horton et al., 2003). This opinion is corroborated by Klingner and Nalbadian (2003:49) who explain that professionalization can strengthen the capacity of public organizations with the availability of clear skills, supportive education and training pathways, and ethical standards. At the individual level, skills, education and training, and ethical standards are important criteria. These professional indicators relate to individual performance and the effectiveness of organizational performance (Behrman, 2006).

Observers say that what is certain in the future is "change". Changes that bring certainty and certainty are manifested in an uncertainty. This sentence invites confusion for readers who do not understand uncertainty. For this reason, a strategy and empowerment of (regional) government apparatus is needed in dealing with these changes.

Government apparatus capable of dealing with change are those which are adaptive to change itself, apparatus capable of surfing the waves of change, whatever its form. Apparatus that can play this is an apparatus that has a high commitment, competence and accountability as evidenced by a strong personality and character that can stand the test. Such apparatus can play a strategy to face the era of change.

Alfin Tofler in his work "Future Shock" which was later quoted by TroutJ., 1996 in his work entitled *The New Positioning* stated that "such a rapid change will have a surprising effect". Time has proven that Tofler's statement above is very precise where the changes we are witnessing are truly surprising. We are less aware that our minds sometimes hate complexity, and even our minds sometimes lose focus, because our minds don't want to understand change. Circumstances have changed, times have changed, we are also required to change. Changing our habits that have not been right in giving the meaning of a "power".

Capacity building in government is often done by providing the best ways to assist the government in carrying out its responsibilities. This includes building government capacity in budgeting, collecting revenues, drafting and implementing laws, making budget management more transparent and accountable, and fighting corruption. In a narrower context, local government capacity development includes efforts to adjust, reform, and modify all policies, regulations, procedures, work mechanisms, coordination, improve the skills and qualifications of local government officials; and changing the system of values and attitudes that are used as references for local government officials, so that they are able to carry out democratic governance and prosper the community. These efforts are called interventions (Nurkholis, 2005).

2.2 Local Government

Historically, the existence of regional government has been known since the reign of the ancestral kingdoms until the system of government imposed by the colonial government. The same applies to the social system and the structure of government, starting from the village, nagari, or in other terms to the top of the government leadership. Besides that, it is also very important to make a comparison of the system of government prevailing in other countries as a consideration for the formation of regional government.

Government or Government in Indonesian means the direction and administration in charge of the activities of people in a country, state, or city and so on. It can also mean an institution or agency that organizes the government of a state, state, or city, and so on. The government is the most common member unit that has certain responsibilities to maintain the system that covers it and a practical monopoly regarding its coercive power (Syafiie, 2010:41). government work environment, region; the scope of the place used for special purposes, territory; the surrounding or intended places in the neighborhood of a city; places affected by the same event; the surface of the body (Nugraha and 2011: 145).

It is different with CF Strong in (Huda, 2012: 28) which states that local government is an organization where the right to exercise sovereign or supreme power is placed. Government in a broad sense is something bigger than an agency or group so that it can be stated that regional governments which are a sub-system of the national government administration system have the authority to regulate and manage their own households. The authority to regulate and manage the household contains three main things in it, namely: first, the assignment and authority to complete an authority that has been submitted to the Regional Government; second, giving trust and authority to think about, take the initiative and determine their own ways of completing the task; and third, in an effort to think, take the initiative and make decisions, involve the community both directly and the DPRD (Retnami. 2001:8).

2.3 Performance of the State Civil Apparatus

According to Setiawan 2004:39, apparatus are workers who are paid by the government to carry out technical government tasks and provide services to the community based on applicable regulations. Meanwhile, according to Handyaningrat (2002: 154) the notion of the apparatus is the administrative aspects needed in the administration of government or the state as a tool to achieve organizational goals, while the definition of apparatus performance according to Mangkunegara (2011: 67) is the result of work in quality and quantity achieved by a person. employees in carrying out their duties in accordance with the responsibilities assigned to them.

The performance of the local government has a very important meaning not only for the community as the owner of sovereignty, and donors as donors of funds, but also important for the Regional Government itself as the Executive, especially for the DPRD which is functionally responsible for the implementation of the legislative function, budget function. and supervisory functions. According to (Chabib Soleh and Suripto, 2011: 5) the importance of local government performance is divided into six parts, namely:

1. As feedback for the Regional Head to improve the performance of the Regional Government in the future
2. To find out which SKPDs have made the biggest contribution and which SKPDs are lacking in contributing to the process of achieving the vision of the Regional Head and to identify various factors causing the success and failure of each SKPD;
3. To generate work motivation for the Head of SKPD and his staff to work more productively;
4. To reformulate policies, programs and activities that are considered more effective and their budgeting as well as more efficient implementation methods/techniques in the process of achieving the vision.
5. Through performance reports, the local government honestly informs the level of success/failure and explains the various failure factors both to the community, to donors, to the DPRD and to the government at the level above.
6. Increase the degree of trust in the community, that the public funds entrusted to them have been used according to the mandate given.

3. METHOD

The method used in research on capacity building on the performance of local government officials in Sabu Raijua Regency is a qualitative research method, with a case study approach. This research will be carried out from August to September 2021 in the scope of the regional apparatus organization of Sabu Raijua Regency.

Informants totaled 45 people with qualitative data and quantitative data while the data sources in this study came from primary data sources and secondary data while the data collection methods in this study were field research, library research, while data collection techniques in this study were This research is observation, qualitative interview and qualitative documents.

In analyzing the data, the data obtained by the researcher used the data analysis technique proposed by Bungin (2012:70), which is as follows:

1. Data Collection (Data Collection)

Data collection is an integral part of data analysis activities. Data collection activities in this study were using interviews and documentation studies.

2. Data Reduction (Data Reduction)

Data reduction is defined as the selection process, focusing on simplification and transformation of rough data that emerges from written notes in the field. Reduction is carried out since data collection begins by making summaries, coding, tracing themes, making clusters, writing memos and so on with the aim of eliminating irrelevant data/information.

3. Data Display

Display data is a description of a set of structured information that provides the possibility of drawing conclusions and taking action. The presentation of qualitative data is presented in the form of narrative text. The presentation can also be in the form of matrices, diagrams, tables and charts.

4. Verification and Confirmation of Conclusions (Conclusion Drawing and Verification)

Is the final activity of data analysis. Drawing conclusions in the form of interpretation activities, namely finding the meaning of the data that has been presented

4. DISCUSSION

Capacity building in government is often done by providing the best ways to assist the government in carrying out its responsibilities. This includes building government capacity in budgeting, collecting revenues, drafting and implementing laws, making budget management more transparent and accountable, and fighting corruption. In a narrower context, local government capacity development includes efforts to adjust, reform, and modify all policies, regulations, procedures, work mechanisms, coordination, improve the skills and qualifications of local government officials; and changing the system of values and attitudes that are used as references for local government officials, so that they are able to carry out democratic governance and prosper the community. These efforts are called interventions (Nurkholis, 2005).

The study of organizational development aims to develop the organization as a whole and as a special reference for the development of renewable organizational capacities (Kondalkar, 2009:47). In this concept, organizational development efforts on the one hand are through the development of its own capacity. This

means that the organizational capacity at the technical, managerial, and institutional levels of the organization must be able to develop according to the needs of the organization in realizing responsive services.

Conceptually, capacity building can be grouped into three levels of organizational activity proposed by Thompson (2003:60), namely the technical level, managerial level and institutional level. When the opinion above is used as a reference in determining the factors that will be analyzed further in this paper, considering that the three concepts offered completely explain all levels of capacity that will be written in this paper. Capacity building in government is often done by providing the best tools to assist the government in carrying out its responsibilities.

Thus, to find out about capacity building on the performance of the local government apparatus of Sabu Raijua Regency, the author uses the theory proposed by Thompson (2003:60) where capacity development includes three levels of intervention, namely:

1. System S level

The level and dimensions of capacity development on the performance of the local government apparatus of Sabu Raijua Regency at the system level is the highest level where all components are included in it. System level, such as the framework relating to the arrangements, policies and basic conditions that support the achievement of certain policy objectives; These components include policies and human resources and others. This is important because the capacity of local government apparatus in development planning is a central issue in the implementation of regional autonomy, especially in Sabu Raijua Regency. This is due to the ability of local government apparatus to become a supporting pillar in the administration of local government (Listyodono & Purwaningdyah, 2008).

According to (Enemark, 2006), (Brown, 2001), Morison, 2001, Araya-Quesada et al. (2010), the system level is where capacity building initiatives are viewed as a system at the environmental level. For development initiatives that are in a national context, the system will cover the entire country or society and all the subcomponents involved. For initiatives at the sectoral level, the system will include only the relevant components. Dimensions of capacity at this level can cover areas such as policy, legal/regulatory frameworks, management and accountability perspectives, and available resources.

The results of the study found that at the level of the strategic policy system and capacity building program, the performance of the local government apparatus of Sabu Raijua Regency was directed to develop institutional mechanisms and rules of the game that allow synergies between individual and organizational roles to collectively achieve the goals of governance and intervention in the regulatory framework. work and policies in the local government system and as a tool to achieve organizational goals (Handyaningrat, 2002:154) , so that it can support the achievement of the desired goals. The framework and policy arrangements must depart from the conception based on Law Number 23/2014 which is operationalized through implementing regulations in the form of Government Regulations and technical regulations such as Kepmen and Inmen. At the regional level, the regions follow up with the making of Regional Regulations and Regional Head Regulations.

The development of the performance capacity of the local government apparatus of Sabu Raijua Regency is often carried out by providing the best ways to assist the government in carrying out its responsibilities. This includes building government capacity in budgeting, collecting revenues, drafting and implementing laws, making budget management more transparent and accountable, and fighting corruption. In a narrower context, capacity building of government apparatus includes efforts to adjust, reform, and modify all policies, regulations, procedures, work mechanisms, coordination, improve skills and qualifications of local government apparatus; and changing the system of values and attitudes that are used as references for local government officials, so that they are able to carry out democratic governance and prosper the community. These efforts are called interventions (Nurkholis, 2005).

The mechanism for developing the performance capacity of the local government apparatus of Sabu Raijua Regency is also continuously carried out in line with the implementation of a decentralized system, where the government gives great authority to the regions to carry out various government affairs. The implementation of decentralization is expected not only to reduce the burden of duties and responsibilities of the central government but also to increase the number and quality of public services so that the welfare of the people of Sabu Rijua Regency can also increase (Kyriacou and Sagaes 2011; Baskaran 2011; Syurmita 2014).

The Sabu Raijua Regency Government continues to act as a problem solver, not as a problem maker. Even a good government actually plays a role in preventing and avoiding problems even though the research findings show that the idea of good governance has not yet fully developed within the local government apparatus of

Sabu Raijua Regency because there are still unethical situations that tend to show pathological behavior. such as being closed, rigid, arrogant, distant from citizens, slow, wasteful and ineffective. Merton (in Makmur, 2003:78) calls it dysfunction, while Crozier (in Makmur, 2003:78) calls it a malady of beaucracy, while Wibawa (2011:25) calls it "organized irresponsibility." Co-optation, patron client, position compensation, reciprocal altruism while the bureaucracy is required to be a public servant for the community, which has a role in regulating, serving, supervising, maintaining good relations between the government and the community (Rohayatin, 2017) in Sabu Raijua Regency.

2. Institutional Level

An entity may be a formal organization such as a government or an agency, the private sector, or an informal community-based or voluntary organization. At this level, capacity development includes the role of the entity in the system, and interactions with other entities, stakeholders, and clients. Dimensions of capacity can cover areas such as mission and strategy, culture and competencies, processes, and infrastructure.

Interventions in structuring organizational structures, organizational decision-making processes, work procedures and mechanisms, management instruments, relationships and networks between one organization and another. Structuring the local government organizational structure was developed based on the principles of organizational effectiveness and efficiency characterized by a lean, flat, and appropriate organizational form. The organizational decision-making process was developed based on a good decision-making model (accurate data collection, participatory, intelligent alternative development, and selecting the best alternative). Local governments must develop procedures and work mechanisms that are sequential, coherent, logical, do not overlap, lead to one point/goal, and do not go back and forth with measurable standards. Local governments must develop management instruments in the form of work guidelines, equipment, facilities and infrastructure as facilities to achieve goals. No less important is the need to develop a coordination system between one unit and another.

Robbins (1994:4) says that an organization or institution is a consciously coordinated social unit, with a relatively identifiable boundary, that works on a relatively continuous basis to achieve a common goal or group of goals. Furthermore, Hasibuan (2011: 120) gives an understanding of the organization as follows: The organization is a formal, structured, and coordinated union system of a group of people who work together to achieve certain goals so that the organization or institution can be said to be a tool to achieve goals, therefore the organization can be said to be a container of activities rather than people who work together in their efforts to achieve goals. In this activity, people must be clear about their duties, authorities and responsibilities, their relationships and work procedures. Such an understanding is called a "static" organization, because it only looks at its structure. In addition, there is the notion of an organization that is "dynamic". This understanding is seen from the point of view of the organization's dynamics, activities or actions rather than the relationships that occur within the organization, both formal and informal.

At the institutional level, capacity building is directed at the ability to create rules of the game that are able to respond and formulate policies by taking into account the values of efficiency, effectiveness, responsiveness, fairness, participation, and sustainability. Institutionally, what happened to the regional apparatus organization in Sabu Raijua Regency was that the regional apparatus' organizational structure was too large without prioritizing the principles of simplicity, efficiency, similarity and coordination.

Each region according to its regional character will indeed have different priorities from one region to another in an effort to improve the welfare of the community. This asymmetrical approach means that although both regions are given the widest possible autonomy, the priorities for government affairs will differ from region to region. The logical consequence of the asymmetric approach is that the regions will have different priorities for government affairs and institutions according to the character of the region and the needs of the community. Regions have the authority to make variations according to the characteristics and needs of the region, as said by Abidin (2001:7) that the size of the existing organization also needs to be adjusted to the type and amount of business required. Besides that, regions need to heed certain principles in organizational arrangement, including the principles of simplicity, easy and cheap (efficiency), similarity in function (similarity) and coordination (coordination).

In the institutional context, the regional government organization of Sabu Raijua Regency is a forum for the implementation of government functions and as a process of interaction between local government and other regional institutions and with local communities. In carrying out the authority inherent in regional government, it is necessary to have an organization that is commensurate with that authority and is urgent to carry out the

functions of regional government organizations. The organization formed must be limited to the authority possessed by the autonomous region.

Although the formation of organizations has become a regional competence according to Government Regulation Number 18 of 2016 Article 3 paragraph (1) it is stated that, "the formation and composition of Regional Apparatuses is determined by Regional Regulations, in accordance with the guidelines established by the Government Regulations", but regional governments should not use that authority to form an organization that is irrational and too big. However, in fact what is seen is a significant swelling of the regional apparatus organization. This certainly affects the inefficiency of the available budget allocations in each region so that the public interest does not receive proportional attention. As stated by Murdiono 2002 in (Juru, 2020: 2-3), "that there is a high tendency to form a fat structure without taking into account the size of the authority and the relevance of the existence of the created work unit".

The dynamics of community demands for service quality require the local government of Sabu Raijua Regency to carry out more efficient institutional arrangements. This character is shown by a lean institutional structure. A large institution will allow for overlap in the implementation of the main tasks and functions between existing organizations. The large diversity of institutional organizations built by the Regional Government creates the potential for duplication of task implementation. This condition creates difficulties in coordinating the implementation of public policies, and also results in the wasteful use of regional resources. The large diversity of organizations that are built also creates more possibilities for the creation of lines of conflict between the institutional organizations themselves. A lean government organization will produce higher quality services to the community and make it easier for service recipients. This condition makes for uncomplicated institutions and service procedures that are easy to understand and provide clarity and legal certainty for the community.

According to Sedarmayanti (2010:324) "it was found that there was a tendency for regional apparatus organizations to be too large and not based on real needs in the regions which had implications for a significant swelling of regional apparatus organizations." This clearly has an impact on the inefficiency of the available budget allocations in each region. For example, the General Allocation Fund (DAU), which should be used for personnel expenditure, development and maintenance of public service facilities and infrastructure, is mostly used to finance local government bureaucracy. Furthermore, Sedarmayanti wrote that in addition to causing inefficiency in the use of resources, organizational swelling led to a wider span of control and less integrated management/control because the functions that should be handled in a single unit must be divided into several organizational units which leads to swelling of the bureaucracy (Sedarmayanti, 2010:325).) . Several cases in the regions regarding the formation of new institutions or the swelling of public organizations, which are often carried out in line with changing institutional regulations (nomenclature), are often assumed by the community as the division of seats or echelons, and are even considered to be robbing people's money for office and operational allowances (Kurniawan, 2010). 2009:75).

Furthermore, the establishment of the regional apparatus organization of Sabu Raijua Regency should be based on consideration of regional financing needs and capabilities. Organizations must be directed at optimizing public services (public service), community empowerment (empowering) and economic development (economic development). In forming an organization, it is necessary to begin with identifying the functions that need to be accommodated and urgently needed to be carried out by the local government. A realistic size of the organization is important, so that the budget ratio is more realistic, and the budget allocated to the public sector can be significantly enlarged. The organization is intended to encourage the creation of optimal and better service delivery efforts to the community, increase the capacity of local governments in service and community empowerment, especially in the bureaucracy within the Alor Regency Government

Findings related to the institutional structure that is too large in the regional apparatus organization of Sabu Raijua Regency will lead to budget inefficiency, in addition to the limited Human Resources of the Apparatus, so that there are still many shortages of employees. In addition, there is an unequal distribution of human resources and is not based on the workload of regional officials. Furthermore, this condition results in the implementation of tasks and functions not being supported by adequate implementing elements/staff, (3) low regional financial resources where the results of the 2019 RI Ministry of Finance evaluation on the Regional Fiscal Capacity Map said that the fiscal capacity of the Regency Alor is at 0.2 181 and is in the Very Low category. This causes many organizational structures that are not supported by the budget to support the implementation of the functions of government affairs,

Good governance have not yet been institutionalized in the regional government of Sabu Raijua Regency, both in terms of structure and culture as well as the lack of integration of various programs and activities between

regional organizational units. Until now, the application of the principles of good governance in local governments is still purely sloganistic. In addition, the problem of professionalism of the government apparatus does not work, so that it affects the institutional output of public services in Sabu Raijua Regency. Another problem is duplication and overlapping of tasks and functions between work units so as not to create institutional coherence. The dynamics of community development is very fast, with increasingly multidimensional problems requiring the Sabu Raijua Regency government to handle regional institutional problems appropriately and professionally.

3. Individual level

The individual level assumes that interventions must be carried out to improve the individual quality of the local government apparatus of Sabu Raijua Regency so that they have the skills, knowledge, attitudes, and work motivation, so that they are able to carry out good governance. At the micro level focusing on individuals and groups as a collection of individuals, capacity building focuses on providing professional and technical resources (Grindle, 1997; Dill, 2000; Horton et al., 2003).

human resources of the local government apparatus of Sabu Raijua Regency must be trained with skills that are in accordance with their fields so that they become competent according to (Grindle, 1997; Horton et al., 2003) namely how individual and organizational dimensions can interact with the environment in developing their capacity, and systems and communities. is the organizational environment and individuals within the organization. At the individual level, continuous individual capacity building plays the role of individual bureaucrats as active learners in the field of tasks that are in accordance with the echelon levels, functions and sectors they handle.

At the individual level, capacity building that is emphasized is on the aspect of teaching individuals in order to obtain quality human resources within the scope of creating increased skills in individuals, increasing knowledge and technology that is currently developing, increasing behavior to provide examples, and motivation to work. better in order to carry out its duties and functions to achieve the goals of small sample institutions/organizations with training, a good recruitment system, a wage system and so on.

Based on the results of the study, it was found that in the scope of the regional government of Sabu Raijua Regency there are still many problems regarding the development of the apparatus, the regional government, namely there are still many employees in the regions whose education level is still low, in this case the high school level and below. On the other hand, although some employees have a bachelor's degree, the number of employees with postgraduate education is still very minimal compared to the total number of employees.

Other findings are there is a tendency that the number of employees of productive age (20–40 years) is not more than that of employees of near non-productive age (40 years and over). The education level of employees has also not been able to fully support the achievement of the main tasks and functions, because the division of tasks has not been carried out based on educational level and background, many structural positions are still vacant or not filled. This is in addition to being related to the capacity of employees, it is also related to the lack of employee training programs (both structural and functional) that have been implemented so far to address the needs of employees as a whole.

In terms of competence, the current employees are not in accordance with the demands of organizational performance. Age, education level, and rank/class do not reflect employee competence, the recruitment system, although quite good, has not been able to attract more qualified employees, resulting in more capable personnel, employee recruitment has not been based on job analysis within the organization in order to support the achievement of main tasks and job evaluations in regional apparatus organizations has not been carried out. Likewise, the preparation of competency standards for positions has not been carried out to obtain individuals who are in accordance with the qualifications of the position.

Assessment of individual performance based on competence has not been carried out, while for the development of the employee database, although it has been carried out, it has not been able to fully produce fast, precise, and accurate information. Another finding is that the development of competency-based employee education and training is still not able to increase the individual capabilities of government officials to the maximum in accordance with the demands of the job.

Civil servants who will take part in a training program are also not based on a training needs assessment (TNA) to determine the competency gap. Curriculum design and training programs that are followed by civil servants must be able to reduce the competency gap. In this case, the education and training approach is competence-based training. But in reality, not all civil servant training institutions follow this approach or method. Even the

sending of civil servants to a training and education program in order to occupy a position often occurs unrelated to their career development. This is, of course, very wasteful as a result of the neglect of the TNA, apart from that most of the employees who have structural and functional positions have never received training in accordance with their positions.

These findings are corroborated by Klingner and Nalbadian (2003:49) who explain that professionalization can strengthen the capacity of public organizations with the availability of clear skills, supportive education and training pathways, and ethical standards. At the individual level, skills, education and training, and ethical standards are important criteria. These professional indicators relate to individual performance and the effectiveness of organizational performance (Behrman, 2006).

From a systems perspective, the system of policies and laws and regulations regarding the management of civil servants has been good enough, but the cause of the lack of professionalism of employees is the implementation of these laws and regulations. For example, promotions and employee transfers that should be carried out transparently as a form of appreciation and tour of duty, are in fact often carried out clandestinely and politically charged.

Another problem is that the regulations contained in PP Number 54/2010 concerning Civil Servant Discipline, are in fact very lax in their law enforcement. First, this rule of law regulates the life of civil servants, including those that are not directly related to the implementation of their duties. Second, disciplinary violations are too accommodated and the punishment given is very lenient. Third, in practice these internal regulations often do not work effectively in the field either, due to individual civil servants who do not comply with these regulations or by leaders who do not strictly enforce the rules.

Observers say that what is certain in the future is "change". Changes that bring certainty and certainty are manifested in an uncertainty. This sentence invites confusion for readers who do not understand uncertainty. For this reason, a strategy and empowerment of (regional) government apparatus is needed in dealing with these changes.

Government apparatus capable of dealing with change are those which are adaptive to change itself, apparatus capable of surfing the waves of change, whatever its form. Apparatus that can play this is an apparatus that has a high commitment, competence and accountability as evidenced by a strong personality and character that can stand the test. Such apparatus can play a strategy to face the era of change.

Alfin Tofler in his work "Future Shock" which was later quoted by TroutJ., 1996 in his work entitled The New Positioning stated that "such a rapid change will have a surprising effect". Time has proven that Tofler's statement above is very precise where the changes we are witnessing are truly surprising. We are less aware that our minds sometimes hate complexity, and even our minds sometimes lose focus, because our minds don't want to understand change. Circumstances have changed, times have changed, we are also required to change. Changing our habits that have not been right in giving the meaning of a "power".

5. CONCLUSION

Capacity building on the performance of local government officials in Sabu Raijua Regency, the author uses the theory proposed by Thompson (2003:60) where capacity development includes three levels of intervention, namely; (a) at the system level it was found that the capacity building of the Sabu Raijua Regency government apparatus includes efforts to adjust, reform, and modify all policies, regulations, procedures, work mechanisms, coordination, improve the skills and qualifications of the local government apparatus; and changing the system of values and attitudes that are used as a reference for local government officials, so that they are able to carry out democratic and prosperous governance, but the community is still found in unethical situations that tend to show pathological behavior such as being closed, rigid, arrogant, far from citizens, slow, extravagant. and ineffective, then at (b) the institutional level it was found that institutionally, what happened to the organization of regional apparatus in Sabu Rijua Regency was the organizational structure of regional apparatus that was too large without prioritizing the principles of simplicity, easy and cheap (efficiency), equality function (similarity) and coordination (c) at the individual level it is known that there are still employees with a low level of education, the tendency of the number of employees of productive age (20–40 years) is not more than employees of near non-productive age (40 years and over), the level of education awai also have not been able to fully support the achievement of main tasks and functions, age, education level, and rank/class do not reflect employee competence, the recruitment system, although quite good, has not been able to recruit more qualified employees, resulting in more capable personnel, employee recruitment has not been based on an analysis of positions in the organization in order to support the achievement of main tasks and job evaluations in regional apparatus organizations have not been carried out. Likewise, the preparation of competency standards for

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WOMEN IN THE INFORMAL SECTOR AND LAYERED VULNERABILITY DURING THE COVID-19 PANDEMIC**Laurensius P. Sayrani, Hendrik Toda and Alfred O. Enamau**

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ABSTRACT

The theme of this article is women in the informal sector and layered vulnerabilities during the Covid-19 pandemic. The novelty proposed in this paper is the focus of the analysis on vulnerable women who work or move to the informal sector during the Covid-19 pandemic. In contrast to other studies that only describe the informal sector and women separately, this paper shows a broader situation of women in the informal sector in facing more complex challenges and layers of vulnerability, both as vulnerable women, working in the informal sector, and the pressures of the pandemic (health, economic, social and psychological). Based on this, the main issues to be explained in this article are: (1) What is the impact of the Covid-19 pandemic on vulnerable women who work in the informal sector? (2) What is the condition of the coverage of the Covid-19 crisis policy towards vulnerable women in the informal sector? The research method used in this research is a qualitative approach. Therefore, this research is directed at constructing the situation of vulnerable women who work in the informal sector in the Covid-19 pandemic crisis situation and the government policies that surround it. In this pandemic situation, the method used, especially data collection, is based on in-depth interviews, especially actors in the informal sector and developed based on document analysis and media publications, especially online discussions involving the government to record policy choices made. The results of this study indicate several main points: (1) The informal sector is a sector that has the character of economic vulnerability because it tends to be inaccessible to government policies. (2) In a crisis situation (Covid-19), women who work in the informal sector experience layered vulnerabilities, namely the economy and health (3) On the policy side, government efforts (central and regional) take various forms, especially social safety net policies (social assistance).) and economic recovery tends to be ineffective. (4) Weak crisis and program communication, weak data on affected groups, strong administrative formalistic approach, systematically eliminating informal sector groups that have not been covered in policy schemes and government data both at the center and the regions. Based on these various situations, the government must immediately implement a crisis policy model in the governance of policies issued by the government. A flexible approach based on dynamic data at the lowest levels of government such as villages and sub-districts to RT and RW must be activated. This allows the policy net to reach marginal groups including groups working in the informal sector.

Keywords: Vulnerable women; informal sector; layered vulnerabilities; Covid-19 pandemic

2. INTRODUCTION

This pandemic started in December 2019 when health authorities in Wuhan (China) reported another cluster of pneumonia cases of unknown etiology. The new coronavirus has been identified as the cause of the pandemic, which has affected many countries globally. The ongoing outbreak of the coronavirus disease (COVID-19) has spread rapidly around the world, and infections in European countries are on the rise (Guiota, 2020).

Wuhan is the seventh largest city in China, with a population of over 11 million people. The city is a major transportation hub in central China, located about 700 miles (1100 km) south of Beijing, 500 miles (800 km) west of Shanghai, and 600 miles (970 km) north of Hong Kong. Wuhan airport has direct flights to major European cities: six weekly flights to Paris, three times to London and five times to Rome so as to be able to spread this pandemic around the world (Nectar, 2020). On March 11, 2020, the World Health Organization (WHO) declared COVID-19 a pandemic. As of August 30, 24,854,140 cases of COVID-19 and 838,924 related deaths were reported worldwide (Beatriz et al, 2020) .

Various countries then began to implement the Covid-19 Protocol in accordance with the recommendations of the World Health Organization (WHO), starting from washing hands, not gathering/conducting meetings, maintaining distance, limiting leaving the house and even taking isolation steps starting from self-isolation of individuals, communities, and even entire cities. (starting from Large-Scale Social Restrictions/PSBB to lock down).

As with the problems and handling of Covid-19 in Indonesia, following the Deep Knowledge Group report published on the Forbes page (Widaningrum and Mas'udi, 2020;59) in terms of safety as measured from policy aspects related to: quarantine efficiency, government management efficiency, monitoring and detection, and emergency treatment readiness , Indonesia is in the five countries with the lowest security levels, along with

India, Sri Lanka, Myanmar, Cambodia, and Laos. Furthermore, in terms of risk, which includes aspects of: infection spread risk, government management, healthcare efficiency, and regional specificity, Indonesia is also included in the category as the highest risk country in the Asia-Pacific region. At the local level, namely NTT in general and the City of Kupang in particular, in this initial phase, the handling of Covid-19 also showed inadequate governance issues.

This assessment can be seen in the trend of the spread of Covid-19 in Indonesia which is quite wide. As of November 12, 2020, the number of confirmed positive patients has reached 452.3 thousand. This figure places Indonesia as one of the countries with the highest Covid-19 cases in the world. Not only positive cases, the death rate is also high. There are around 55.3 thousand cases of death due to Covid-19, placing Indonesia at 26th in the world. The high rate of case growth is due to the high positivity rate in Indonesia, which is 11.53%. This figure is far from the maximum limit set by the World Health Organization (WHO) which is below 5% (Katadata.co.id).

As for NTT itself, as of November 2020, the number of Covid-19 cases has reached an alarming number, approaching 1000 cases in November 2020 (<http://www.covid19.nttprov.go.id/home/data>) and the City of Kupang. is the area with the highest risk compared to other areas in NTT which has a relatively low level of spread, so it has a great impact on vulnerable women who work in the informal sector as well as their vulnerability during the Covid-19 pandemic. This is important because the COVID-19 outbreak has changed the lives of people around the world through its rapid spread, death toll, social disruption, and devastating economic impact (Yin Wua et al, 2020).

In the initial phase of the spread of this virus, from March 2020 until the end of 2020 when Covid-19 cases were identified in Indonesia and began to spread widely throughout Indonesia, this was marked by limited information and the lack of consolidation of various institutions to tackle the spread and impact of this virus. This situation is important to be observed in particular because it becomes the context for understanding the crisis sensitivity of state institutions and the public in general.

The Kupang City area which is the focus of this study is actually not the center of the spread of Covid-19 widely, but has the same psychological, social and economic effects as the area where the center of the spread of Covid-19. This is important to be a concern because in the initial pandemic situation, residents of this region faced almost the same psychological, social and economic pressures as the Covid-19 distribution center, but the government's attention to this area was limited, especially marked by limited infrastructure and resources, both health and wellness. and the economy in dealing with the impact of the Covid-19 pandemic in the initial phase of the pandemic.

The novelty of this article lies in an analysis of the situation of groups of women working in the informal sector in dealing with the Covid-19 pandemic situation in the two contexts referred to. The main idea put forward is the multiple vulnerabilities faced by women, namely their vulnerability as women, the vulnerability of their businesses in the informal sector and their vulnerability to the economic and health impacts of the Covid-19 pandemic. But on the other hand, government policies, especially in the social safety net scheme (Social Assistance) have not been effective enough to help vulnerable women groups face the Covid-19 pandemic crisis.

The findings in this article are also very important and can contribute to previous research related to the informal sector, especially those placed in a rather macro context, namely developing countries such as Pratap and Erwan (2006); Sharma (2012) as well as somewhat general ideas especially in economic contexts such as Mishra (2010) and Nazara (2010). Specifically in the study of public administration, this paper is in line with ideas about governance of public problems in crisis situations such as Rosenthal and Kouzmin (1997) regarding crisis management; Moynihan (2009) who put forward the idea of the importance of changing organizational strategy in dealing with crises based on network governance.

3. METHOD

This research is a qualitative descriptive research method based on the results of the research that the authors did, respectively, regarding the informal sector and the Covid-19 pandemic (2019) and Social Assistance for the impact of the Covid-19 pandemic for vulnerable women groups (2021). In general, these two studies were conducted in Kupang City based on the constructivism paradigm (Burrell and Morgan, 1979) with qualitative methods (Neuman, 2013) as the main method. Through this kind of approach and method, the situation of marginalized women working in the informal sector can be interpreted in depth and specifically based on different cases. The main informants are marginal women who are female heads of household, mothers (parents) with disabilities, victims of layoffs and those who cannot access the Social Assistance program.

4. DISCUSSION

4.1 Covid-19 and the Government's Initial Response

The new coronavirus has been identified as the cause of the pandemic, which has affected many countries globally. The ongoing outbreak of the coronavirus disease (COVID-19) has spread rapidly around the world (Nectar, 2020) and infections in European countries are on the rise (Guiota, 2020).

As of August 30, 24,854,140 cases of COVID-19 and 838,924 related deaths were reported worldwide (Beatriz Perondi et al, 2020). The COVID-19 outbreak has changed the lives of people around the world through its rapid spread, death toll, social disruption, and devastating economic impact (Yin Wua et al, 2020).

Various countries then began to implement the Covid-19 Protocol in accordance with the recommendations of the World Health Organization (WHO), starting from washing hands, not gathering/conducting meetings, maintaining distance, limiting leaving the house and even taking isolation steps starting from self-isolation of individuals, communities, and even entire cities. (starting from Large-Scale Social Restrictions/PSBB to lock down) (Guiota, 2020).

In Indonesia, at the regulatory level, government policies related to the Covid-19 pandemic can be seen in two areas, namely the central government and regional governments. At the level of the central government, the government's official policy was issued in March 2020, namely the issuance of Presidential Decree No. 7 of 2020 concerning the Task Force for the Acceleration of Handling Corona Virus Disease 2019 (Covid-19).

This policy in the form of a Presidential Decree is basically the government's response when WHO as the world health agency announced that Covid-19 would become a global pandemic on March 11, 2020. In general, this presidential decree focuses on the formation of a task force team that is under and responsible for against the president.

The task force did not last long. Through Presidential Regulation Number 82 of 2020 concerning the Committee for the Handling of Corona Virus Disease 2019 (Covid 19) and the National Economic Recovery which was signed by President Joko Widodo on July 20, 2020. In this Presidential Regulation, particularly in Article 20 paragraph 2 letter c, the authority of the Task Force is exercised by the Policy Committee and/or the regional Covid-19 Handling Task Force/Covid-19 Handling Task Force. In the design of this presidential regulation, the structure is divided into two main groups, namely the Covid-19 Task Force led by the Head of BNPB Doni Monardi and the National Economic Recovery Task Force led by Deputy Minister 1 for BUMN Budi Gunadi Sadikin, both of whom are under the leadership of the Chairman of the Policy Committee, Airlangga Hartato, who is also Coordinating Minister for the National Economy (<https://nasional.kompas.com>).

In addition, there is also a Presidential Decree Number 12 of 2020 concerning the Implementation of Non-Natural Disasters, the spread of Covid 19 as a national disaster. In line with that, there is Government Regulation Number 21 of 2020 concerning Large-Scale Social Restrictions. The PSBB was determined by the Minister of Health at the suggestion of the regional government by taking into account the epidemiological aspects of the area. Not only that, at a more operational level, the president even issued Presidential Instruction No. 6 of 2020 concerning Improvement of Discipline and Enforcement of Health Protocol Law in the prevention and control of Covid-19.

Regarding the budget, Presidential Instruction Number 4 of 2020 concerning Re-focusing of activities is the basis for the government and local governments to reallocate budgets and procure goods and services. In a crisis situation, this Presidential Instruction is actually expected to be able to encourage ministries and local governments to act more quickly, precisely, with focus and synergy. Based on this Presidential Instruction, the central government and regional governments are re-focusing, reallocating budgets and procuring goods and services that will allow the handling of Covid-19 to be accelerated.

In relation to the informal sector, it was recorded that household consumption growth according to Bank Indonesia data (bi.go.id) in the fourth quarter of 2019 was below the psychological level of 5% (yoy), at 4.97% (yoy). As a result, economic growth in the quarter was also dragged down to 4.97% (yoy). Entering the beginning of 2020, several indicators still do not show any improvement in consumption. For example, Bank Indonesia reported that the real sales index (IPR) in January 2020 contracted -0.3% (yoy) and the IPR in February 2020 is projected to fall again to -1.9% (yoy). For the first quarter of 2020, the IPR is projected to contract by -1.1% (yoy), lower than the fourth quarter of 2019 where the IPR is still able to grow 1.5% (yoy) and inversely proportional to the first quarter of 2019 where the IPR grew rapidly to 8.8% (yoy) (bi.go.id)

Therefore, since March 2020 as described by the Forbil Institute Team and IGPA, MAP Fisipol UGM (2020; 245), the government has taken several policies for this sector, including increasing the budget and expanding the scope of program recipients which had been implemented and planned before the pandemic, namely Family Hope Program (PKH), Basic Food Cards, and Pre-Employment Cards. The PKH Social Policy Budget was enlarged from Rp. 2.4 million to Rp 3.4 million per year and the coverage was expanded from 9.2 million residents to 10 million residents. The same expansion was also carried out on the Sembako Card program where from 12.4 million to 20 million residents with a value of Rp. 150,000 to Rp. 200,000. Another policy, namely the Pre-Employment Card, was also increased from Rp. 10 trillion to Rp. 20 trillion, with a total of 5.6 million beneficiaries. Until November 2020, the realization of the program, especially the National Economic Recovery Program, reached Rp. 366.86 trillion or 52% of the total prepared budget of Rp.695.9 trillion. Specifically for the Social Protection cluster, Rp. 176.38 trillion (86.51%) of the total funds of Rp.203.9 trillion (Covid 19.go.id).

At the local level, as explained by the Mayor of Kupang in the NTT Economic Recovery Webinar in the Midst of the Pandemic, the City of Kupang received funds from the government of around Rp. 70 billion. While the budget from the government of Kupang City itself reached Rp. 26 Billion (Webinar Leader Talk Inews, 2020). The NTT Provincial Government itself, as said by Zakarias Moruk, as the Head of Finance for NTT, explained that the NTT Regional Government allocated funds of around Rp. 810 billion for handling Covid-19 in NTT which was included in an unexpected shopping post with details for health of around Rp. 100 billion, net social security of approximately Rp. 100 billion and economic empowerment of approximately Rp.600 billion (NTT Network Dialogue Looking Back at the Covid-19 Budget in NTT, 2020).

4.2 The Impact of the Covid-19 Pandemic on Vulnerable Poor Women in the Informal Sector

a. The Informal Sector and Its Vulnerabilities

Sayrani's research (2018; 2019) on the informal sector in Kupang City shows the vulnerability of this sector economically, although on the other hand it also has its own resilience. In general, informal businesses that develop in Kupang City tend to be independent, small-scale, limited management management but managed with a communal character that relies on social support (family, friends) for business development. The informal business sector that develops in Kupang City with these characteristics seems to have a socio-economic function as a partial and related economic support for employment, namely: 1) as an "economic location" transition from the formal sector. This is especially the case for the labor segment which for some reason is no longer accommodated in the formal sector. 2) the informal business sector also acts as a reservoir for workers who have not been accommodated in formal sector businesses from the start. This is related to the accessibility of this segment to the formal sector such as limited education and skills. 3) the informal sector as a "location" for the transition to the formal sector. This segment is those who have access to the formal sector but have not yet realized it. 4) the informal business sector as a permanent destination for economic business for workers. This segment is because they have limited access to the formal sector or based on a prospective economic assessment and then continue to work in the informal sector on a regular basis.

Regarding the process of developing the informal business sector in Kupang City, at least there are important dimensions that drive this sector, namely push and pull factors. On the driving factor, the informal business sector develops due to the reality of the existence of a segment of society (labor) that has limited access to the formal sector in this city. This is related to the profile of education (non-graduate), skills and experience are low. Furthermore, at the same time, there is a kind of "socio-economic communality" that is developing at the community level to develop businesses in informal types and scales. This explains when limitations in the accessibility dimension of the world of work occur, then on the other hand, there is an order that supports and even encourages this segment to "sustain socially" through possible businesses, which in this case are informal businesses.

In addition to these driving factors, informal businesses tend to develop because this sector has a character that allows it to be chosen as an economic business, namely simple but dynamic management, small risk as well as limited profits but is considered prospective to support the economy (households) as a side business or permanent business. main income.

Although informal sector businesses tend to develop in Kupang City, the accessibility of this sector to programs (funding) especially from the government and financial institutions (banks) tends to be limited. Perceptions of informal businesses as not serious, not prospective, side businesses and other negative perceptions psychologically and technically limit the access of informal businesses to financial institutions. In this position, cooperatives then become the main choice besides personal funds (including loans, selling assets) in accessing

funds in the context of developing their businesses. This kind of pattern tends to be ineffective in triggering the growth of the informal sector business adequately.

b. Vulnerable Women in the Informal Sector and the Pandemic

Covid-19, as a pandemic, has a broad impact on everyone in Kupang City in general. In general, social restrictions, the decline in economic activity caused economic shocks for many people, especially for poor families in the midst of the threat of health problems which are also worrying. However, the impact on women's groups seems to be very serious when compared to other groups. Vulnerable women, especially those with the status of female heads of families, working in the informal sector, families with disabilities and survivors or families of Covid-19 survivors feel an extraordinary burden in the midst of this Covid-19 pandemic.

The identification carried out by Sayrani et al (2021) shows some of the impacts felt by women's groups in Kupang City. First, women are vulnerable to layoffs during the Covid-19 pandemic. Some of the informants in the study were women heads of families who had to face layoffs in their workplaces. Even though at the beginning of this pandemic, the termination of this work contract did not feel so heavy because there was a lot of help he received from both the government and non-government institutions, but when the assistance received began to decrease, the economic burden on his family began to be felt. The informal sector such as odd jobs is an option to survive after termination of employment.

Second, At the same time, when some of them try to enter the informal sector, they are faced with a situation of serious pressure from informal businesses. In a pandemic situation, the efforts of women's groups are under tremendous pressure. Typical informal businesses such as selling home-based rice wraps, for example, have practically not developed at all as a result of the low purchasing power of the people around their homes (the selling area). Some of them also have husbands who also work odd jobs such as construction workers, motorcycle taxis, which is made worse by the lack of demand during the pandemic, so they practically do not get an income. To some extent, the main support is assistance from the family perfunctory.

Third, the increase in the family's economic burden. Regarding the second point, where business pressure is getting heavier, it is also increasingly difficult when the Covid-19 pandemic actually increases the economic burden (expenditures) on families that must be managed. The thing that most women complain about is the rising cost of education, especially providing learning tools such as mobile phones and the cost of pulses (data packages) for online learning needs. On the other hand, the policy of reducing school fees was not implemented, even though the learning process was carried out at home with additional online expenses.

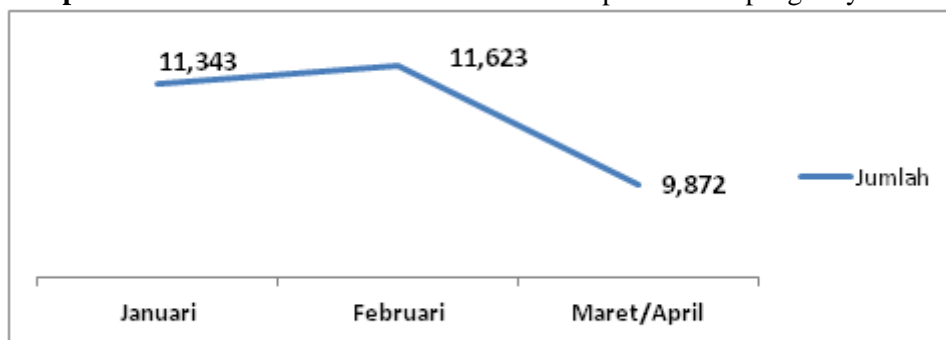
Fourth, psychological pressure. During the pandemic, several mothers interviewed admitted to experiencing much heavier psychological pressure. The absence of work during the pandemic, increasing needs, limited education but also being required to take care of children's online education, have really hit them hard.

Fifth, health pressure (covid-19 survivors). The most serious thing is the group of women who are infected with the Covid-19 virus. This condition practically makes them powerless both in terms of health and economy. They must independently especially prepare food and drinks regularly for families who are positive for COVID-19, even though on the other hand, their economic conditions are also unstable. This situation is getting more difficult because there is practically no assistance at all from the government in this matter.

These various descriptions show that the impact of the COVID-19 pandemic has turned out to be very extraordinary—a mother's term in a focused discussion—for women's groups. The impact is not only targeting economic problems but also related to women's psychological pressure in managing family budgets and children's education.

c. Government Policy (In Kupang City)

Then how does the government (especially local governments) mitigate the vulnerability of citizens, especially women who are vulnerable to the pandemic? The results of Sayrani, et al (2021)'s research show that social assistance from the impact of Covid-19 only relies on central government programs. Meanwhile, the Kupang City Government will no longer budget for social assistance due to the COVID-19 pandemic in 2021. The central government programs are Cash Social Assistance, Non-Cash Food Assistance and the Family Hope Program.

Graph 1: Number of Cash Social Assistance Recipients in Kupang City in 2021

Source: Kupang City Social Service, 2021

Graph 1 shows that the number of BST beneficiaries tends to decrease especially in March and April 2021 to 9,872 beneficiaries. Furthermore, for the Family Hope Program (PKH), the beneficiaries of this program in Kupang City in January 2021 amounted to 11,093 and in March 2021 it was reduced to 10,879 beneficiaries. In addition, the Non-Cash Food Assistance (BNPT) program through the e-warung scheme, the number of beneficiaries also fluctuates.

Table 1: Number of Beneficiaries of BNPT in Kupang City in 2021

Month	Amount	No Transaction/ Realization
January	12,206	288
February	13,668	344
March	8097	-
April	8,097	-

Source: Kupang City Social Service, 2021

d. Allotment for Women's Group

Regarding special social assistance for women's groups, the results of research identification show that there are no specific policies from the Kupang City Government for women (poor) groups during this pandemic. Thus the program approach in dealing with the impact of a pandemic tends to be general. The program that is claimed to be specific to women is PKH, which actually existed before the pandemic. However, the implementation of PKH is still faced with technical-administrative problems that confuse women's groups as experienced by informants.

There are two things that can explain the absence of a pandemic impact program for women's groups: First, at the level of the Kupang City Government itself, the cash social assistance policy, for example, is considered a central government program. Thus they tend to position themselves as field implementers. It means that the perspective of this program is not their concern, but the technical and administrative implementation of the program is the main concern of the city government, especially technical services such as social services.

Second, the Kupang City government's own programs, such as non-cash social assistance in the form of basic necessities, for example, were built and implemented with the assumption that the COVID-19 pandemic is a problem that affects everyone, especially the poor, including women.

In addition, the argument that social assistance programs also target women's groups but does not specifically mention helping women's groups. The presence of a group of women (mothers) at the Kelurahan Office who dominates the collection of basic food assistance is claimed to be a sign that this program is also specifically targeting women's groups. A Lurah in Kupang City conveyed that for this reason, once again, Covid assistance is not available for women, but for sure I know, but that all social assistance, be it BST, be it provincial assistance, or assistance from the City Government who comes to visit The lurah's office is 80% women. This means that this assistance can be said to be beneficial for women.

e. Distribution Problems of the Covid-19 Pandemic Impact Handling Program

Based on the results of the identification of this study, it was found that there were several types of groups of poor women who did not receive assistance due to Covid-19, namely: 1) groups of poor women who did not receive assistance due to population administration problems; 2) a group of poor women who have KTP Kupang City but are not accessed by Social Assistance.

In the first category, the social assistance approach based on population data is indeed a problem in itself in its implementation. The unequal distribution of residents who have E-KTPs, high mobility of residents, the large

number of migrants living in Kupang City without a change in administrative status are technical problems that limit them to the condition of being without an identity in Kupang City to get social assistance due to this pandemic .

This kind of technical-administrative obstacle has not been properly resolved by the government or the data collection system that has been built. At the implementation level, there is no “discretion” at the local level to capture target groups that receive social assistance from the government.

In the second category, the group of poor women did not receive information related to social assistance. They actually knew there was Social Assistance when they saw their neighbors who received Social Assistance. This condition shows that there are several groups of poor women who both have Kupang City ID cards and do not receive social assistance due to the Covid-19 pandemic. The limited information accessed by women's groups, the data collection system that tends to be closed is a problem that hinders the access of some women's groups to get this social assistance.

Related to the condition that there are several groups of poor women who do not get social assistance, some of them try to access it. The most frequent effort made by them is to confirm about the social assistance they do not get, especially to the Head of the RT. The head of the RT seems to be the sort of level of government they are most likely to confirm. However, in general, there is no meaningful response from the RT Chair. The answer that is generally accepted is the determination of the names of the beneficiaries directly from the (central) government.

At the same time, in general, this group of poor women is reluctant to confirm to a higher level of government such as the Lurah. Fear and shame are generally the reasons why poor women do not confirm the status of social assistance for them.

This condition clearly shows the very weak position of the poor, especially women's groups, in accessing and complaining about social assistance from the impact of the pandemic which has been felt by them in an extraordinary way. The only level of government that can be accessed is RT. This means that women's groups can only be connected to the “government level” which has a very limited role in the social assistance policy scheme due to the pandemic.

Facing the impact of the pandemic situation as described previously and without assistance from the government (bansos), forcing poor women and their families to do many things (strategy) to survive in a situation of increasingly severe economic pressure. The results of this study indicate that the strategy is even very sad, such as sacrificing children's needs such as milk as described by a breakout informant.

Meanwhile, for the group of women who received social assistance in the form of basic necessities or in the form of money, there were not enough complaints or complaints regarding the amount or the mechanism. The amount of money that must be received by the recipient is not deducted or reduced in the amount of assistance. However, for basic food assistance, the problem that is generally found is the unclear information about the frequency of food assistance provided. Based on information received from the kelurahan that basic food assistance will be given three times, so far he has only received two basic necessities. Until now, there is no further information on the distribution of basic necessities from the government. On the other hand, they tend to wait for a call and make no effort to confirm it with the head of the RT or the kelurahan government.

4.3 Analysis of the Need for Handling the Impact of the Covid-19 Pandemic for Women

The Social Assistance Program due to the Covid-19 pandemic has, to a certain extent, provided direct benefits for the affected community. The women's group also acknowledged that the available assistance helped them in a pandemic crisis situation, especially related to the availability of food (sembako). This kind of approach has been the basis for claims for the social assistance program so far.

This kind of claim seems to be true as a general phenomenon, but this kind of claim also raises the issue of the still limited understanding of the impact of Covid-19 which has turned out to be very burdensome for vulnerable groups, especially the urban poor women, who, as described previously, have problems with great pressure. also.

At the same time, cash assistance in the form of cash amounting to Rp.300,000 per month, to a certain extent felt very inadequate to support the impact of the pandemic for women's groups which turned out to be very large. A beneficiary mother told me about this. As a mother who is the head of a family with one baby child, her husband who is still in prison, forces the mother to work odd jobs, namely receiving calls to wash clothes, etc. This fee is practically only for the cost of eating and drinking for him and his child. Meanwhile, the cost of

boarding is practically not paid. Currently, when receiving the two-month aid money, which is Rp. 600,000, it will be used to pay for the boarding fees that have been in arrears.

This kind of situation also shows the problem of the general approach used in providing social assistance. The special and sensitive considerations of women who, for example, have babies are not taken into account in the assistance scheme. Yet they have a very serious double burden and impact.

Other impacts, such as the increased need for children's education during online education, as previously described, are of course not sufficient to rely solely on non-cash social assistance in the form of basic necessities. This means that this particular type of problem has not been taken into account in the design of the social assistance provided.

5. CONCLUSION

The main conclusion of the article is that the Covid-19 pandemic has had a different impact on society. Vulnerable women such as female heads of household, mothers (parents) with disabilities, working in the informal sector face much greater and complex pressures. These pressures are related to the decline in the family's economic base, the increasing economic burden during the pandemic, health pressures to relatively heavy psychological pressures.

On the other hand, the government's mitigation through social safety net policies during the pandemic (bansos) is not necessarily able to effectively reach vulnerable women's groups. The program's neutral logic base and a strong approach to the technical-administrative model have serious implications for marginalized groups of vulnerable women. Not all vulnerable women can access government social assistance, and the space and opportunities for vulnerable women in supervising and complaining about the social assistance scheme and implementation are also relatively limited. The condition also appears that there is no scheme for involving vulnerable women in determining program targets and targets. Although in terms of benefits, social assistance can help vulnerable women, but it is temporary and has not been based on a sustainable empowerment program in dealing with the Covid-19 pandemic crisis.

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HEARING LOSS IN INDIA: AUDIOLOGICAL PERSPECTIVE

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ABSTRACT

Primarily preventable and avoidable is the Concern of deafness globally and in India. 278 million individuals have incapacitating listening damage according to the 2005 conclusions of WHO. From 4.6% to 8.8% the majority of deafness in Southeast Asia varies. Substantial hearing damage is undergone by 63 million people (6.3%) in India. The second-largest widespread reason for disability is calculated to be auditory damage through nationwide disability questionnaires. A huge challenge in this crisis has been made due to an absence of a qualified workforce and human resources. For Avoidance and Administer of Auditory loss, a National Programme has been instigated by the Indian government. The crucial elements of the project are emphasized by this summary. Workforce advancement and ear service requirements containing restoration is what it concentrates on. At the main healthcare level, the project is being enforced. Therefore it envisages a deduction in the concerns of auditory loss and deterrence of forthcoming auditory damage in India.

Keywords: Loss of Hearing, Audiological perspective, National Programmes

1. CIRCUMSTANCE EXAMINATION OF AUDITORY IMPAIRMENT IN INDIA

In the method of worldwide hygiene evolution, extremely in low- and middle-income (LAMI) nations, the economic concern related to incurable illnesses is on the surge.¹ Across countries auditory loss—one ignored incurable condition—is the extensively prevalent sensorial disability. 278 million individuals have incapacitating auditory damage according to the 2005 conclusions of WHO, i.e moderate-to-profound auditory damage in both ears (i.e. >41 dB auditory impairment).² Auditory damage is the next greatly widespread reason for years lived with disability (YLD) computation for 4.7% of the whole YLD. With a majority ranging from 4.6% to 8.8%, the crisis of auditory loss is not in proportion elevated in Southeast Asia region.³ Population-based questionnaires in 2003 in India utilizing the WHO agreement⁴calculated the majority of listening damage to be 6.3% or nearly 63 million individuals undergoing substantial hearing damage.³ In India, the calculated majority of adult-onset hearing loss was established to be 7.6% and childhood-onset hearing loss to be 2%. On the majority and etiology of listening damage multicentric study was performed by the Indian Council of Medical Research (ICMR) at 4 centers: Calcutta (Kolkata), Delhi, Madras (Chennai), and Trivandrum (Thiruvananthapuram) on an amount of 11,665 individuals in pastoral regions and 10,935 in metropolitan regions earlier during 1977–80. 10.2% was found to be the majority of the listening damage. Serious auditory damage totaled 24.4% and lenient auditory damage 15.9%. All around, pastoral regions indicated an elevated majority of auditory damage differed with metropolitan regions.⁵

The National Sample Survey (NSS) 58th round (2002) polled disorder both in metropolitan and pastoral homes and establish that The auditory loss was the next greatly widespread reason for the disorder after locomotor disorder.⁶ In the urban and the rural areas, auditory loss cumulated for 9% and 10% respectively of all disorders. The grade auditory disability was verified by banking upon the importance of a person's incapability to listen suitably. It was totaled that Per 100 000 persons were 291 the amount of individuals with auditory disabilities; it was elevated in pastoral (310) distinguished with metropolitan areas (236). In the exact poll, about 32% of individuals had profound hearing (an individual couldn't listen at all or could listen to only loud sounds) and 39% had a serious listening disorder (an individual could listen only to screamed words). About 7% of individuals born with a listening disability were indicated in the questionnaire outcomes⁷. At >60 years of age in the pastoral, about 56 % documented the onset of the listening disorder, and about 62 % documented the onset of the listening disorder in metropolitan regions. In the prior 1 year, the incidence of auditory disability was documented to be 7/100 000 population.⁶

The importance of lenient levels of auditory damage and one-sided listening damage would be bigger than these conclusions for both sides of auditory damage. By the WHO survey, the main reasons for auditory damage and ear infection in India have been documented.³ For the reversible auditory damage ear wax (15.9%) was the vastly widespread reason. In India (10.3%) noncorrosive conditions such as getting old and presbycusis are the second vastly widespread reasons for hearing damage. The additional directing reasons for auditory damage are incurable suppurative otitis media (5.2%) and serous otitis media (3%) in Middle ear illnesses. The other reasons encompass arid holes of the tympanic membrane (0.5%) and both sides' hereditary and inborn auditory loss (0.2%).

In India, the apparent reasons for the auditory damage were also enquired about by the NSS 58th round. The apparent reason was old age for about 25% of issues for pastoral regions and 30% issues for metropolitan India. Of the other justifications, ear release and additional diseases were observed as affected by a relatively vast amount of individuals with auditory loss. Also, in the exact questionnaire, almost 1% of auditory damaged individuals documented German measles/rubella as the reason for the auditory loss⁸.

It has been documented by WHO³ that half the reasons for hearing impairment are avoidable and about 30%, though not avoidable, are treatable or can be overseen with assistive equipment. Therefore, about 80% of all hearing impairments can be said to be preventable. There is a deficit of human resources to deal with the problem of Hearing impairment has been noted by WHO³. In India, the approximate amount of ENT experts is 7000 and the number of otologists is 2000. The audiometrist:population proportion was established to be 1:500 000 and The proportion of speech therapists to the hearing impaired society was 1:200. In metropolitan than pastoral regions, there is also a maldistribution of faculty with more individuals found. Human resource examination indicated that there is a necessity to improve the abilities and workforce of practicing specialists and other faculty.

2. NATIONWIDE REACTION TO AVOIDANCE AND ADMINISTRATION OF AUDITORY LOSS

Evaluating the huge effect of auditory loss on the public, financial, and efficient existence in India due to its limitation and also rifts in human resources to fulfill this health challenge, fundamental healthcare continues the technique of option for the requirement and enactment of deterrence of auditory loss or listening damage in India. The National Programme for Prevention and Control of Deafness (NPPCD) was commenced by the Indian government in 2006. In 25 districts in 10 states and 1 union territory, this program was enforced as it originally began as a pilot program⁹. By the climax of the 11th five-year strategy (2007–12), it will be upscaled to contain 203 districts in all states and union territories.

At the climax of the 11th five-year strategy, the NPPCD was inaugurated with the long-term goal of lessening the aggregate illness concern of listening damage and auditory loss by 25%. To encompass three degrees of deterrence and care the project intends¹⁰. By the requirement of a reasonable reaction at these degrees, they are primary, secondary, and tertiary ear safekeeping. It intends to prevent auditory damage on record of illness or damage, recognize ahead and deal with crucial ear issues, and therapeutically rehabilitate individuals with hearing loss of all age groups. For ear care aids it envisages enhancing existing inter-sectoral linkages and expanding institutional capability^{9,11}. It facilitates outreach training and social consciousness through creative and practical data, education, and communication (IEC) techniques in the deterrence of hearing damages¹².

Along With the umbrella health mission of the Indian Government—the National Rural Health Mission (NRHM)—at the state and district levels the program has been incorporated. Under the NPPCD, reserves for the undertaking of the project are provided to the state health institution and project council of NRHM to accomplish several exercises through district health societies. To act as a supervisory and monitoring administration for steady handling of the techniques to avoid and curb hearing loss is the position of the state council¹³.

A micro-plan is required to be formulated by the district health community and program council¹⁵. On a constant purpose and to operationalize program elements at the district level. Across coordination between various agencies and partners—government, non-government, and society fellows.

3. MAIN ELEMENTS OF THE PROGRAMME⁷

3.1 Capacity building and manpower development

Of any national health program, Human resource growth stays a crucial element. At all degrees, the NPPCD through the innovation of instructed workforce at numerous degrees builds up the crew for productive and useful release of ear safekeeping. Where the program is active, appointed state therapeutic universities will work as amidst of quality for ear safekeeping involvement in selected regions. For the duty of giving specialized aptitude to the program in the region, ENT specialists and audiologists from appointed medical universities are appointed. ENT coordinators at the state medical college impart practice to district ENT specialists for 5 days under which support of hands-on surgical practice in micro-ear treatments about hearing loss is given. Crucial treatments that can be conducted at the district grade are encompassed below this practice and consist of myringoplasty, tympanoplasty, stapedectomy, and mastoidectomy. In diagnostic and therapeutic skills, District-grade audiologists/audiometrists are given a 2-day reorientation. In extension, pediatricians, and obstetricians at the district hospital grade and society¹⁴.

Health center levels impart a day's practice to sharpen them to several components accountable for the damage of listening in infants and kids with a particular priority on antenatal and perinatal maintenance¹⁵.

Main healthcare doctors are the crucial parties in the liberation of social health endeavors in the Indian healthcare liberation process. The NPPCD pertains to physicians in main health centers (PHCs), school health strategies, and those employed in several manufacturing departments in the regions for transmitting ear maintenance at the main maintenance level. To sensitize these faculty to their investment in the NPPCD a 2-day practice program is administered. Using standardized procedures doctors are equipped to operate common ear conditions¹⁶. Furthermore, abilities in the usage of an otoscope are improved and they are uncovered to the operative and restoration assistance accessible in their region to pertain subjects to the applicable degree of maintenance¹⁷.

The interest of grassroots employees, administrators, and society health recruits is needed to build perception amid the society about the deterrence of auditory damage as well as to underline the necessity for immediate maintenance¹⁶. The NPPCD sensitive men and women multipurpose health employees at the sub-center degree, general health nurses at the PHC, kid improvement program officials, Anganwadi workers (AWW), and their administrators Accredited Social Health Activists (ASHAs) and qualified birth assistants. These employees are required to have a crucial part in promoting the early detection and deterrence of auditory damage¹⁸.

To load the lacunae in audiological aids at the region degree, the program has developed a post of audiometric associate at all regions, to accomplish several pieces of training about auditory loss deterrence and management. For the gain of adequate linguistic and communication techniques by a minor auditory deficient kid, the program has formulated an educator to be educated and inaugurated for accomplishing listening and language restoration of kids at the region degree. The practicability of including interns who have completed their graduation in auditory, conversation, and language pathology at the All India Institute of Speech and Hearing impairment (AIISH), Mysore and Ali Yavar Jang National Institute of Hearing Handicapped (AYJNIHH), Mumbai will be reviewed while the execution of the program²⁰.

4. EAR SERVICE PROVISION INCLUDING REHABILITATION

4.1 Ear health promotion and prevention

Grassroots workers and health personnel will transmit IEC continuously to community members to create awareness about hearing, and speech issues. To sharpen them about the significance of the first observation of ear issues and auditory damage, regular discussions with community-based institutions such as the gram panchayat, village health council, and Mahilamandals will be administered. The AWWs and auxiliary nurse midwives (ANMs) will be educated about the accurate manner to nourish an infant to lessen the situations of otitis media due to malfunctioning nourishing methods. To screen for loss of hearing priority will be positioned on the immediate referral of kids produced after tough labor or those who bore birth asphyxia. For examining the speech and listening of kids attending immunization hospitals and outreach training health workers will also be acquainted. For sensitizing society members involving school teachers local, culture-specific creative techniques will be acquired²¹.

4.2 First detection of ear issues and managing

House-to-house questionnaires to verify listening issues in all age ranges will be performed by the AWWs and ASHAs, below the oversight of multipurpose employees and a document of individuals with hearing loss will be retained. On any illness/issues about the ear established on an inspection list, university health physicians will achieve university-level screening of pupils of elementary classes to recognize and operate²². At these health installations, medical faculty at the elementary and inferior grades will be taught to give sufficient systematic ear maintenance. Middle ear infections and impacted wax are preference circumstances for regional administration. To the district, the hospital will be all about individuals compelling particular diagnostic installations, difficult issues, and those wanting operative involvement.

Extensive ear care services will be given by ENT doctors and audiologists at the regional level. District and community health center (CHC) level pediatricians and obstetricians drilled below the program will screen and pertain to any kid brought into existence by high-risk gestation or labor, as well as those kids who are endangered to a high-risk component in babyhood. By an examination of speech landmarks, pediatricians can distinguish auditory damage early, distant from dealing with familiar ear issues in kids²³. Under the NPPCD a basic set of appliances and medications will be given at all degrees for ear maintenance. For the beneficial delivery of services, adequate referral associations between various levels of care will be enhanced²⁰.

4.3 Community screening camps

For hearing loss and listening damage, these will be composed at the PHC/CHC/district degree to screen the community. Improving awareness about the deterrence and control of hearing loss will be given by these camps. Wherever feasible these centers will be administered by experienced faculty along with personal

practitioners. One screening center will be composed every month at any healthcare degree—PHC/CHC/district clinic by cycle; accordingly, 24 centers will be established in each district over 2 years. Of crucial society stakeholders, panchayat members, Mahilamandals, and youngster executives the centers will be composed. The institution of these camps will also be promoted by the Non- governmental organizations (NGOs) specified by the district health community²⁴.

4.4 Rehabilitation and hearing aid provision

State medical colleges will pertain to the subjects with difficulties that need tertiary care. Patients whose difficulties are not amenable to therapeutic or surgical modification and who need listening assistance will be matched with the similar at the district degree. Kids undergoing bilateral sensorineural deafness will be mainly involved in this²⁵. To be accommodated to adequate individuals nearly 200 listening aids will be made accessible in every district. Older individuals with presbycusis will be given listening assistance in alliance with the Ministry of Social Justice and Empowerment, which gives rehabilitative aid to the aged³⁶. Wherever possible, adequate associations will be formulated with society restoration centers and district disability rehabilitation centers (DDRC) in meeting with the Rehabilitation Council of India²⁶.

4.5 Surveying and maintenance

For all degrees surveying equipment has been arranged. In deafness deterrence and control, pointers have been formulated to supervise the achievement of the districts. To higher levels, monthly summaries are to be produced citing improvement and delivered²³. To give occasional supportive supervision on-site examinations will also be accomplished. From allied institutions, an acknowledgment will consistently strive^{27,33}.

5 ADDITIONAL ACTIVITIES UNDER THE PROGRAMME

Conformational training for additional reasons of auditory loss particularly as noise-induced listening damage and genetic auditory loss needs extra programmatic inputs. Based on the feasibility of accessible interventions the deterrence and control of these reasons will be explored and established. Will also be inspected a similar policy for rubella vaccination below the national immunization project for genetic hearing loss deterrence. Advocacy heeding law about noise and the commission of a listening preservation program will be done. At the national level, 'noise-free days' and 'Rashtriya Shravan shaktidiwas' will be scheduled to increase awareness and accord crucial significance to hearing loss²⁸. The involvement will be undertaken by preschool teachers through NGOs and public-private partnerships. The inclusion of hearing loss consciousness in textbooks at the elementary and higher school grade will be explored through an alliance with the National Council of Educational Research and Training (NCERT)^{16,32}. Study for formulating cost-effective, high-quality listening assistance within the nation will be facilitated. Accomplishing community-based research will fill hygiene voids in data heeding listening damage and auditory loss. At occasional duration, operational studies to enhance the execution of the program will be administered^{29,30}.

6 CONCLUSION

In greatly cost-effective outcomes combination of major ear maintenance with fundamental and district health procedures is inclined to result. The techniques in the NPPCD, if enforced with political will and powerful administration, will reduce the extent of ear issues and deter preventable auditory loss in India. To the accomplishment of the program, networking and coalitions with various institutions, professionals, and faculty stay crucial. In the corroborating climate promoted by the takeoff of NPPCD, it is essential to take strong and eager efforts to lessen the concern of auditory loss in India.

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THE CAPACITY OF THE NUSA KENARI REGIONAL PUBLIC DRINKING WATER COMPANY IN THE DRINKING WATER SERVICE SYSTEM IN TELUK MUTIARA DISTRICT, ALOR REGENCY

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ABSTRACT

One of the areas in East Nusa Tenggara which also has a Regional Public Drinking Water Company (PERUMDAM) is Alor Regency. It is important for PERUMDAM Nusa Kenari in increasing its institutional capacity to be able to obtain a more optimal level of service. In the context of providing services to the community and increasing regional competitiveness, adequate local government capabilities or capacities are required. Regional government capacity development always contains an understanding of various efforts to improve service performance to the community.

The method used in this study is a qualitative research method, with a case study approach with 45 informants with the type of qualitative data and quantitative data while the data sources in this study came from primary data sources and secondary data while the data collection method in this study was research Field Research (Field Research), Library (Library Research) while the Data Collection Techniques in this study were Observation, Qualitative Interviews and Qualitative Documents. Furthermore, the data obtained by researchers used the data analysis technique proposed by Bungin (2012:70), namely; Data Collection (Data Collection), Data Reduction (Data Reduction), Data Display and Verification and Confirmation of Conclusions (Conclusion Drawing and Verification).

The results of the study found that the capacity of Nusa Kenari PERUMDAM in the drinking water service system in Teluk Mutiara District was still very low and still needed a lot of improvement in institutional capacity development to be able to increase its service capacity. If each element that is in the organizational capacity (individual, organizational, system level) and organizational capacity (technical, managerial, and institutional) shows good symptoms then it is included in the supporting factor, but on the contrary if it shows bad symptoms then it includes in the inhibiting factor. If the supporting factors are more than the inhibiting factors, then the capacity of the organization is good, but on the contrary if there are more inhibiting factors in the organization, the capacity of the organization is still weak.

Keywords: Development, Capacity, Drinking Water, Region

1. PRELIMINARY

East Nusa Tenggara, which is one of the provinces in Indonesia, has its own challenges in providing clean water because it is an archipelago and has different regional characteristics. In general, rainfall in the Indonesian region is dominated by the influence of several phenomena, including the Asia-Australia Monsoon Wind system, El-Nino, La Nina and other phenomena. The climatic conditions in the East Nusa Tenggara (NTT) Region cause rainfall to have distinctive characteristics compared to other regions. The NTT region has a savanna climate which is characterized by the presence of extensive grasslands. This is evidenced from historical rainfall data in the province of NTT which has a fairly long dry month, which is approximately 8 dry months in a row.

One of the characteristics that distinguishes NTT Province from other parts of Indonesia is its drier climate. In some areas, the annual water balance shows a deficit (Djuwansah, Utomo, and Sastramihardja, 2001). Researches conducted by the Center for Research and Development of Geotechnology-LIPI in NTT Province (Sule et al, 1989; Arsadi et al, 1995) are aimed at exploring groundwater (bore wells) as a source of alternative water resources in dry climates. The results show that the amount of available groundwater reserves is very limited and the exploitation costs are relatively expensive.

According to the 2019 NTT Clean Water Statistics Infographic (NTT Clean Water Statistics 2019, BPS NTT) it is known that the NTT Province of 22 regencies/cities in the NTT region there are only 16 clean water companies with a total workforce of 1,136 people. The percentage of the volume of clean water that is channeled is 76.44% for non-commercial, 5.46% for commercial and industrial, 2.22% for social, and 0.63% for special. Meanwhile, there was a water leak in the distribution which caused a loss of 15.25% (5.2 million m³).

The ownership status of the clean water company is entirely owned by the regional government with the largest source of capital, namely 68.75% coming from the local government, 30.06% from the central government and 1 company, a small part of whose capital comes from outside the local government finances, namely from foreign capital (government Australia) (NTT 2019 Clean Water Statistics, BPS NTT).

When viewed from the water production capacity in NTT Province, there is a fairly large vulnerability between potential production capacity and effective production capacity. Water production capacity is the machine's ability to produce clean water. There are two types of water production capacity, namely: (1) Installed (potential) production capacity is the maximum production capacity of clean water that can be produced by machines or equipment owned by the company in liters per second. (2) Effective production capacity is the average production of clean water produced in liters per second.

One of the areas in East Nusa Tenggara which also has a Regional Public Drinking Water Company (PERUMDAM) is Alor Regency. The capital city of Alor Regency is Kalabahi. The population of Alor is about 211,872 people, while its area is 2,928.88 km². This district is in the form of an archipelago and is crossed by international trade shipping lanes to the Pacific Ocean. One of the areas that is the focus of clean water services provided by PERUMDAM Alor Regency is the city area which is a sub-district city of Alor Regency, namely Teluk Mutiara District.

Teluk Mutiara Subdistrict, Alor Regency has 16 administrative areas consisting of 10 Kelurahan and 6 Villages with a population of 50,927 people 10,368 families and an area of 80.18 Km², which is located along the coast in a hilly bay, where there are also 8 streams that have been flooded. used to meet water needs.

The drinking water service areas in Teluk Mutiara sub-district are West Kalabahi Village (Kenarilang River), Lendola Village (River. Seilan and Kampung Pisang River), Air Kenari Village (River. Air Kenari), Central Kalabahi Village (Sungai Tombang). As of December 31, 2020 the company has 4,767 domestic customers, consisting of 3,481 active customers and 1,286 inactive customers. All of these customers come from regular SR installations. The customers used for the calculation of service coverage are domestic customers with a total of 4,767 customers.

The number of people served in the administrative area of Teluk Mutiara Subdistrict is 23,835 people (4,767 families) or 46% of the total population of 50,927 people (10,368 families).

Table 1.1 List of River Water Capacity as a Source of Drinking Water in Teluk Mutiara District (PERUMDAM Nusa Kenari, 2020)

No. –	Name River flow	Village / Village Location	Kp. District Water (Ltr/Sec)	Kp. Used PERUMDAM Ltr/Second
1	Canarylang River	West Kalabahi Village	18.7	9.2
2	Buono River	Adang Buom Desa Village	12.4	
3	Seilan River	Lendola Village	18.4	9.4
4	Banana Village River	Lendola Village	19.6	14.12
5	Water River Here	Canary Water Village	9.8	6.8
6	Tombang River	Ex. Middle Kalabahi	24.7	15.8
7	Sun Maase	Ex. West Welai	8.3	
8	Yase River	Fanating Village	7.4	
	Amount		119.3	55.32

Data on the capacity of river water as a source of drinking water in Teluk Mutiara District are as recorded in table 1.2. To make it easier to see how the difference between the sub-district water capacity and the capacity used in PERUMDAM will be illustrated in the following graph:

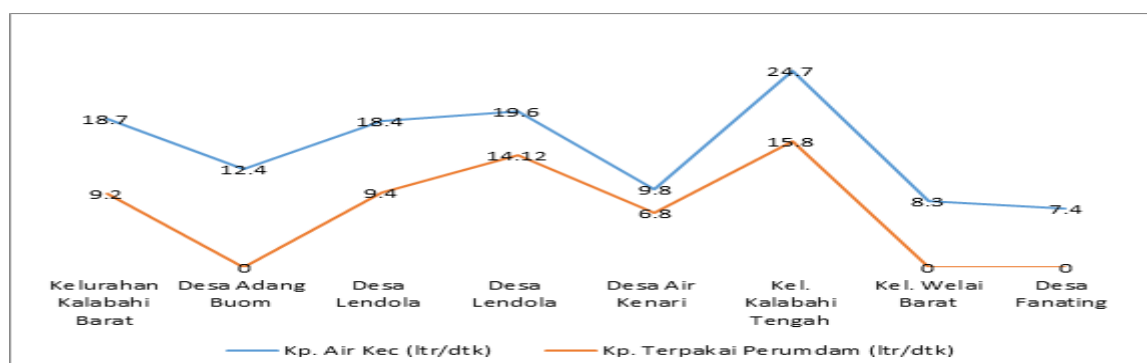


Figure 1.1 Capacity of River Water as a Source of Drinking Water in Teluk Mutiara District (PERUMDAM Nusa Kenari, 2020)

From the data above, it can be seen that the sub-district water capacity and PERUMDAM water capacity differ quite a lot in several villages in Teluk Mutiara District. The same thing can be seen from the availability of sub-district water and the availability of water used by PERUMDAM. Judging from the amount of water discharge (ltr/sec), available water, water demand and ideal capacity, there are also quite striking differences between sub-district water and PERUMDAM water. This can be seen from the table below:

Table 1.2 Availability of Water in Sub-District Water and Water for PERUMDAM Nusa Kenari (PERUMDAM Nusa Kenari, 2020)

No	River Stream Name	Water Discharge (Ltr/Seco nd)	Water Demand Standard	Water Available in Kec. TM (Ltr/Hr)	Water Needs Kec. TM (Ltr/Hr)	Capacity Idea
1	District Water	119.3	60 (Ltr/Hr)	10,307,520	3,055,620	7,251,900
2	PERUMD AM water	72.5	60 (Ltr/Hr)	6,264,000	3,055,620	3,208,380

Based on the data above, it can be seen that the availability of sub-district water and perumpam water has a large enough difference. The availability of water managed by PERUMDAM itself continues to experience a reduction, which has an impact on the decline in the distribution of clean water to customers, this is caused by the condition of the existing network which is old, easily damaged and high liming, as well as the decreased capacity of raw water in springs which has an impact on seizure of water catchment areas between PERUMDAM and KP-SPAM in the village and the number of drill wells in the Kalabahi City area.

The above problems will certainly affect the people who are customers of the services of PERUMDAM Nusa Kenari, especially in the Teluk Mutiara Subdistrict. Data regarding the number of customers in Mutiara Bay are as follows:

Table 1.3 Customers of PERUMDAM Nusa Kenari in Teluk Mutiara Subdistrict (PERUMDAM Nusa Kenari, 2020)

No	Customer Group	Number of Connections
1	Simple Household	2,798
2	Big Household	172
3	Small Commerce	69
4	Big Commerce	10
5	Public + Social Facilities	115
Amount		3.164

The data above shows that the total number of customers from PERUMDAM Nusa Kenari in Teluk Mutiara District is 3,164 consisting of simple households, large households, small businesses, large businesses, and public and social facilities. Meanwhile, based on BPS Alor data on Alor in Figures (2019), the population in Teluk Mutiara District is 53,339 with a growth rate of 0.42%. Meanwhile, the latest data on the number of households at the Alor Regency BPS in Alor Regency in Figures (2015) shows that Teluk Mutiara District has a total of 11,021 households. When viewed from the large number of households and the number of households that are customers of PERUMDAM, the percentage is very small. The comparison between the number of households that are PERUMDAM customers and those who are not served can be seen in the following figure:

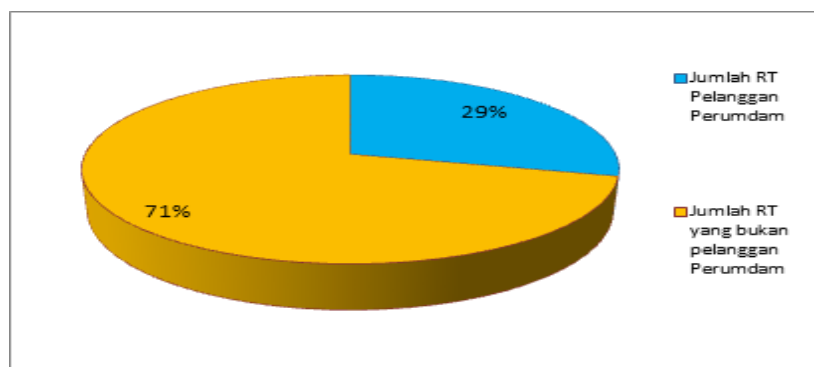


Figure 1.2 Comparison of Number of RTs Served by PERUMDAM and Unserved 2020 (Researcher Analysis)

Judging from the available data, PERUMDAM Nusa Kenari only serves a small portion of the people of Teluk Mutiara Subdistrict, which is 29%, while most of the people in Teluk Mutiara Subdistrict at 71% have not been served by PERUMDA Nusa Kenari.

With a small number of service customers, PERUMDAM Nusa Kenari has not yet carried out an independent performance assessment. Performance appraisal from PERUMDA Nusa Kenari always depends on performance appraisals carried out by external parties such as BPKP for example (BPKP NTT, 2021). As the performance assessment carried out by BPKP (2021) based on the indicators of the Ministry of PUPR, the performance value of PERUMDAM Nusa Kenari based on the performance indicators of BPPSPAM (Agency for Improvement and Implementation of the Drinking Water Supply System), PERUMDA Nusa Kenari, Alor Regency for the fiscal year 2020 is 2.02 or into the "Pain" category. Compared to 2019, there was even a decrease in the value of the performance level by 0.25 from 2.27 to 2.02 (BPKP: 2021).

Meanwhile, for performance research based on the indicators of the Ministry of Home Affairs No. 47 of 1999 concerning Guidelines for Performance Assessment of Regional Drinking Water Companies, PERUMDA Nusa Kenari, Alor Regency for the 2020 financial year amounted to 44.82 with the "Less" category. Compared to 2019, there was a decrease in the performance value of 3.10 from 47.92 to 44.82.

Meanwhile, in the RPJMD, the Alor Regency Government has not set a service coverage target that must be achieved by the company by the end of 2020. With a service coverage that must be achieved by the company by the end of 2020. With a service coverage of 29% for the Telyk Mutiara sub-district in 2020, taking into account the trend of service coverage for the entire service area of PERUMDA Nusa Kenari in the last three years has decreased from 14.63% in 2018 to 10.42% in 2020. It can be concluded that the company is not ready to support the target of 100% access to national drinking water.

During 2020, PERUMDA Nusa Kenari has made efforts to increase service coverage by adding 29 new customer connections (House Connections). However, in 2020, PERUMDA Nusa Kenari also disconnected 384 SR subscribers (BPKP: 2020). This can be seen from the diagram, as follows:

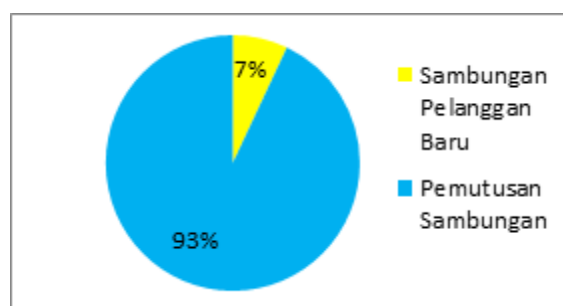


Figure 1.3 Comparison of the Number of New Connections and Termination of Connections (BPKP: 2020)

Looking at the data above, it shows that although there are a number of new house connections, the number of disconnections is much higher and until now there has been no local government effort to increase the service coverage of PERUMDA Nusa Kenari in 2020.

Another problem that emerged as BPKP's findings (2020) in its report also found problems in quality, quantity, and continuity (3K) as well as the preparation of the RPAM. The main problem is regarding quality and continuity which has not been met to date. The water quality has not met the requirements set out in the Minister of Health Regulation No. 492/MENKES/PER/VI/2010 dated 18 June 2010 concerning the Management of Drinking Water Quality Supervision. External monitoring of drinking water quality has been carried out by the Alor District Health Office, although it has not met the minimum sample size. PERUMDA Nusa Kenari has not provided ready-to-drink water services by implementing the Prima Drinking Water Zone (ZAMP) and has not implemented *Smart Grid Water Management* (SGWM).

Problems also occur with regard to the rate of water loss. Loss of water (*Non Revenue Water* / NRW) can be interpreted as the recorded difference or the difference between the water produced and entered into the system with the amount of water recorded on the customer meter. With this understanding, the loss of a certain amount of water that can occur due to leaving the system without being used or not recording water use due to various reasons. Water loss based on the cause can be classified as physical water loss and non-physical loss. Physical losses are losses caused by leaks that occur in system components, in reservoirs, in pipes both distribution and transmission, or in house connections. Non-physical losses are water losses that are not physically visible but

can be known from calculations and records of the amount of water distributed to customers. All include various administrative and management errors and vulnerabilities as well as system equipment, including meter reading and recording errors (*production and customers*), unmetered water usage, unpaid water usage, illegal connections and water theft, estimated usage, and administrative errors. account, so that water is used but not recorded in the account. At PERUMDAM Nusa Kenari the volume of water distributed to customers is 1,382,528 m³, the volume of water that has been issued by accounts to customers is 773,558 m³. So there is a distribution NRW of 44.05%. This is because the customer's water meter is damaged and has never been calibrated and the distribution network is leaking. The difference between the volume of water that has been issued by accounts to customers and the volume of NRW can be seen in the following diagram:

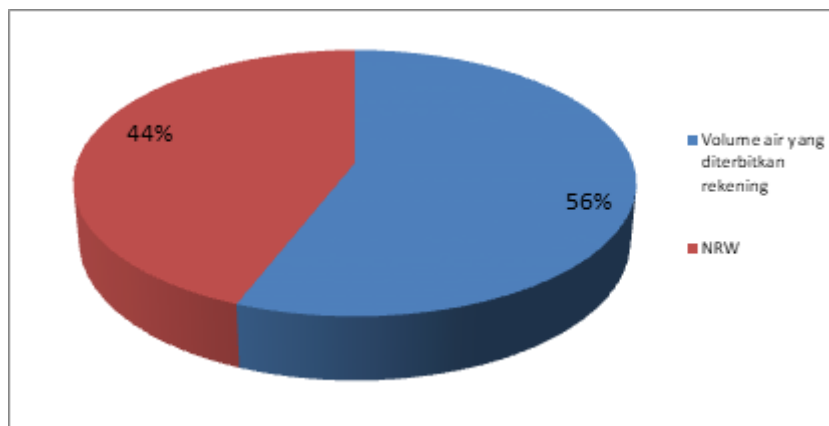


Figure 1.4 Comparison of Billed Water Volume and NRW Volume (BPKP: 2020)

From the data shown above, the level of water loss is quite large, reaching 44%. Of course, this is for government organizations that also carry out the profit function, which is a big loss because in the end PERUMDAM Nusa Kenari also experienced a loss rate of 44%. This is in line with the results of observations made by BPKP (2020) regarding customer connections. The results of the physical inspection of the BPKP review team to the field in the service area for 45 customer connections, with the result that 22 connections did not have water meters and 23 connections were equipped with water pipes with damaged conditions.

From the various problems described above, it becomes important for PERUMDAM Nusa Kenari in increasing its institutional capacity to be able to obtain a more optimal level of service. In the context of providing services to the community and increasing regional competitiveness, adequate local government capabilities or capacities are required. Regional government capacity development always contains an understanding of various efforts to improve service performance to the community.

In the process of institutional capacity development, it can be seen from the point of view of organizational theory but can also directly refer to the concept of organizational capacity which can also be studied in capacity development theory. Capacity development or better known as *capacity development* or *capacity building* has various definitions. Grindle and Hilderbrand, (1995) define *capacity building* as "improvements in the ability of public organizations, either single or cooperation with other organizations, to perform appropriate tasks". In other words, *capacity building* is an increase in the ability of public organizations to achieve certain goals, both independently and in collaboration with other organizations. Horton et al. (2003) which explains that capacity development is "an ongoing process to increase the ability of the organization to carry out its functions and achieve its objectives, and to learn and solve problems". This concept describes capacity development as the ability to perform basic functions, namely goal achievement, learning and problem solving. This opinion is almost the same as that expressed by Milen (2001) who sees *capacity building* as a "continuing process of strengthening of ability to perform core functions, solve problems, define and achieve objectives and understand and deal with development needs". This concept explains that the capacity development process is an ongoing process related to strengthening the ability to perform core functions, solve problems, define and achieve goals and understand and address development needs.

After seeing the concept of institutional capacity development which is then linked to various problems that have also been described previously relating to the services of PERUMDAM Nusa Kenari, the researcher assumes that all these problems must be solved by strengthening or developing institutional capacity in this case the capacity development of PERUMDAM Nusa Kenari, Alor Regency. . So the researcher feels it is important to conduct a study that will discuss the capacity development of PERUMDAM in the context of the service system for the regional public drinking water company. So that researchers are interested in conducting research

with the title: " The Capacity of the Nusa Kenari Regional Public Water Company in the Drinking Water Service System in Teluk Mutiara District, Alor Regency".

2. LITERATURE REVIEW

2.1 Capacity Building (*Capacity Building*)

Eade (1997 in Dwiyanto, 2002:17) suggests that capacity building can be defined as a major approach in development that aims to strengthen human capacity so that they can determine for themselves what is useful for them to make changes for the future.

There are several requirements for capacity building (especially local government) namely participation, access to information, accountability and leadership (Warsito and Yuwono, 2003). *First* ; Participation, which is where government officials must follow all levels in terms of capacity building, both at the leadership level to the staff level. Which is where participating in this capacity building can increase knowledge, skills, and self-confidence. *Second*; access to information, this requirement is no less important for capacity building for government officials. This capacity building must be started by providing access to information for the development of the apparatus' capacity to increase the knowledge capacity of the apparatus themselves. *Third*; accountability, this is also an equally important condition. Accountability in capacity building so as to carry out programs must be ensured that these programs are *legitimate* , accountable and accountable programs later. *Fourth* , leadership, which plays a very important role in the capacity development program of an organization. The more leaders give confidence to employees to develop, then that's where we can see whether the capacity development program in an organization is successful.

Capacity building is an effort to develop a variety of strategies to improve the *efficiency, effectiveness, and responsiveness* of government performance. Namely *efficiency* , in terms of time (time) and resources (*resources*) needed to achieve an *outcome* ; *effectiveness* , in the form of the appropriateness of the effort carried out for the desired result; and *responsiveness* , namely how to synchronize between needs and abilities for that purpose. (Grindle, 1997 in Riyadi, 2006:11).

Morison (2001) defines capacity building as a process for carrying out a, or series of movements, multi-level change within individuals, groups, organizations and systems in order to strengthen the adaptability of individuals and organizations so that they can respond to environmental changes. which exists.

Capacity development is an effort intended to develop a variety of strategies to improve the *efficiency, effectiveness and responsiveness* of organizational performance. This is as stated by Haryono (2012:39) as follows: *Capacity building is intended to encompass a variety of strategies that have to do with increasing the efficiency, effectiveness, and responsiveness of government performance* . strategies that can improve the efficiency, effectiveness and responsiveness of government performance). Then Philbin (1996:20) defines *Capacity Building* as follows: "*Capacity building is defined as the "process of developing and strengthening the skills, instincts, abilities, processes and resources that organizations and communities need to survive, adapt, and thrive in the fast-changing world."* Capacity building as a process of developing and improving the skills, talents, capabilities of organizational resources as a need to survive, adapt, and grow the organization in an era of rapid change.

2.2 Stages of Capacity Development

The stages or phases of institutional capacity development according to Gandara (2008) are as follows:

1. Preparation Phase. In this phase there are 5 working steps, namely:
 - a. Identification of the need for capacity building, this work step has the main activity of identifying the reasons and the real need to develop capacity.
 - b. Define goals. This work step has the main activity of conducting consultations with key stakeholders to identify the main issues of capacity building.
 - c. Give responsibility. This work step has the main activity, namely determining the person in charge of capacity building activities, for example forming a technical team or work unit.
 - d. Designing a capacity building process. This work step has the main activities, namely determining the mapping methodology according to the problems that arise and scheduling activities regarding the mapping process and the next stage of formulating a capacity building action plan.
 - e. Resource allocation. The main activities are identifying funding for capacity building process activities and allocating resources by formulating resource requirements according to the required budget and can be approved by the authorities.

2. Analysis Phase. In this phase there are 5 working steps, namely:
 - a. Identifying problems, in this case, the main activity is in the form of examining the problem for further investigation.
 - b. Analysis of the process, in this case the main activity is in the form of linking problems for capacity mapping with system, organizational and individual performance processes.
 - c. Organizational analysis in this case the main activity is in the form of selecting an organization to be investigated more deeply (organizational mapping).
 - d. Mapping the gap in capacity, in this case, the main activity is in the form of mapping the gap between the ideal capacity and the reality.
 - e. Summarizing urgent capacity building needs, in this case, the main activity is in the form of summarizing findings and collecting proposals for capacity building action plans.
3. Planning Phase. In this phase there are 3 working steps, namely:
 - a. Annual planning, the main activity of which is to formulate a draft capacity building action plan.
 - b. Make a medium term plan, the main activity is in the form of consultative meetings.
 - c. Develop a priority scale, the main activity of which is to determine the priority scale of capacity development and the stages of its implementation.
4. Implementation Phase. In this phase there are 5 working steps, namely:
 - a. Programming, the main activity of which is allocating current resources.
 - b. Planning for capacity building projects, the main activity of which is to formulate policies for implementing capacity development.
 - c. Selection of providers of capacity development services, the main activity of which is to identify external services and products related to the implementation needs of capacity development to be carried out.
 - d. Project implementation, the main activity of which is the implementation of the annual capacity development program according to available resources and available schedule.
 - e. Process monitoring, the main activity of which is to monitor capacity building activities.
5. Evaluation Phase. In this phase there are 2 working steps, namely:
 - a. Impact evaluation, the main activity is evaluating the achievement of capacity development, such as improving performance.
 - b. Re-planning the action plan for capacity building, the main activity is to analyze the findings of process monitoring and impact evaluation in the context of the need for capacity building re-planning.

The activities mentioned above are very necessary in increasing institutional strength in building the achievement of organizational goals. More Sedarmayanti (2004:336) says that: "Institutional capacity development is a very important and decisive part of bureaucratic reform, so that it really leads to efforts to realize a government that meets the criteria of *good governance*".

2.3 Organizational Capacity Development

In the simplest terms, organizational capacity is the ability to carry out organizational activities (Yu-Lee, 2002). In the public sector, organizational capacity has been broadly defined as the government's ability to structure, develop, lead and control human, financial, physical and information resources (Ingraham, 2005). In the social or non-profit sector, organizational capacity is a set of management practices, processes or attributes that help an organization to fulfill its mission (Eisinger, 2002).

The same thing was expressed by Horton et al. (2003) explains that organizational capacity is "*its potential to perform - its ability to successfully apply its skills and resources to accomplish its goals and satisfy its stakeholders' expectations*". In this concept, it is clear that the relationship between the external environment of the organization and the activities of the organization is clearly visible.

In its development, the concept of organizational capacity has many points of view according to experts. There are those who explain that the meaning of capacity is only a matter of the acquisition of resources or funds (Kushner and Poole, 1996; Brooks, 2002). Another opinion explains that capacity includes any quality that can

hinder or promote success in achieving organizational goals (Chaskin et al, 2001). On the other hand, organizational capacity is sometimes defined as the internal quality of the organization, which consists of human and capital resources (Brinkerhoff, 2005) and on the other hand is considered a concept with both internal and external dimensions, for example external financial support, supportive relationship network, training resources, and political support (Forbes and Lynn, 2006).

Organizational capacity development is not only multidimensional, but also capable of being divided into different functional categories. Eisinger (2002), for example, defines the essential elements of social organizational capacity as resources, effective leadership, staff skills and adequacy, institutional and external relations. While Ingraham et al. (2003 in Irawan, 2016) describes four management subsystems whose dimensions are the capacity of government organizations, namely finance, human resources, capital and information technology systems.

Horton et al. (2003) explained that organizational capacity development is generally related to the resources, knowledge and processes carried out by the organization. Staff, infrastructure, technology and financing are the basic resource capacities of every organization. In addition, strategic leadership, program and process management, and networking and linkages with other parties, are management capacities in organizations.

Christensen and Gazley (2008) explain that organizational capacity as a function of (1) organizational infrastructure, (2) human resources, (3) financial resources and management systems and (4) political characteristics and market demands as the external environment. Some of the above factors serve as a synthesis and a way to facilitate a more operational understanding of the variables of organizational capacity development.

Christensen and Gazley (2008 in Irawan, 2016) explain that the difficulty in defining organizational capacity development lies in the quality of understanding both as inputs or resources and processes. This opinion is reinforced by Sowa et al. (2004) which explains that the best capacity is seen as a concept consisting of structure and process.

From some of the opinions above, the author tries to relate the factors that are the reference in measuring organizational capacity with the level of organizational activity according to Thompson (2003). Several factors that have been mentioned by several experts such as Eisinger (2002), Horton et al. (2003), Christensen and Gazley (2008) conceptually can be grouped into three levels of organizational activity proposed by Thompson (2003), namely the technical level, managerial level and institutional level. When the opinion above is used as a reference in determining the factors that will be analyzed further in this study, considering the three concepts offered completely explain all levels of capacity to be studied. The following table will briefly describe the analysis.

Table 2.1 Classification of Organizational Capacity by Activity Level

Activity Level	Eisinger (2002)	Horton et al. (2003)	Christensen & Gazley (2008)
Technical	Staff resources, skills and adequacy	Staff, infrastructure, technology, financing	Human resources, infrastructure, finance
managerial	effective leadership	Strategic leadership, program, process management	Management system
Institutional	institutional and external relations	Networks and linkages	Political characteristics, market demand

Sources: Thomson (1967), Eisinger (2002), Horton et al. (2003), Christensen and Gazley (2008)

From the table above, it can be concluded that the characteristics of organizational capacity consist of:

1. Technical capacity, including: human resources, infrastructure, technology and financing.
2. Managerial capacity, including: effective leadership, program and management system.
3. Institutional capacity, including: networking, involvement of other parties, political characteristics and market demand.

This overall capacity can be investigated further in the context of public service delivery organizations. The ten factors in measuring organizational capacity include: human resources, infrastructure, technology, financing,

effective leadership, programs, management systems, networks, linkages with other parties, political characteristics and market demands.

2.4 Water Demand Analysis

The use of water by a community increases with the progress of the community, so that the use of water is often used as a measure of the high and low progress of a society. Types of Raw Water Needs According to Terence (1991) the raw water needs in a city are classified, among others:

1. Domestic needs. Domestic needs are the need for clean water to fulfill daily or household activities such as drinking, cooking, individual health (bathing, washing, etc.), watering plants, yard, transporting waste water (kitchen and toilet waste).
2. Non-domestic needs. Non-domestic needs are raw water needs used for several activities such as: (a) institutional needs, (b) commercial and industrial needs, (c) public facilities needs, are clean water needs for activities of places of worship, recreation, terminals.
3. Leakage and water loss. The amount of water demand due to leakage and water loss is quite significant. Leaks and water loss are caused due to illegal connections and leaks in the system which mostly occur in accessories and pipe connections.

3. METHOD

The method used in this study is a qualitative research method, with a case study approach with 45 informants with the type of qualitative data and quantitative data while the data sources in this study came from primary data sources and secondary data while the data collection method in this study was research Field Research (*Field Research*), Library (*Library Research*) while the Data Collection Techniques in this study are observation, qualitative interviews and qualitative documents.

In analyzing the data, the data obtained by the researcher used the data analysis technique proposed by Bungin (2012:70), which is as follows:

9. Data Collection (*Data Collection*)

Data collection is an integral part of data analysis activities. Data collection activities in this study were using interviews and documentation studies.

10. Data Reduction (*Data Reduction*)

Data reduction is defined as the selection process, focusing on simplification and transformation of rough data that emerges from written notes in the field. Reduction is carried out since data collection begins by making summaries, coding, tracing themes, making clusters, writing memos and so on with the aim of eliminating irrelevant data/information.

11. Data Display

Display data is a description of a set of structured information that provides the possibility of drawing conclusions and taking action. The presentation of qualitative data is presented in the form of narrative text. The presentation can also be in the form of matrices, diagrams, tables and charts.

12. Verification and Confirmation of Conclusions (*Conclusion Drawing and Verification*)

Is the final activity of data analysis. Drawing conclusions in the form of interpretation activities, namely finding the meaning of the data that has been presented.

4. DISCUSSION

The fundamental purpose of organizational development is to improve the capabilities of the organization itself. Increasing organizational capacity has an impact on the organization's capacity to make quality decisions by making changes to the structure, culture, tasks, technology and human resources. The main approach to this is the form of organizational capacity that can maximize the involvement of people in making effective decisions in carrying out organizational tasks.

The study of organizational development aims to develop the organization as a whole and as a special reference for the development of renewable organizational capacities (Kondalkar, 2009:47). In this concept, organizational development efforts on the one hand are through the development of its own capacity. This means that the organizational capacity at the technical, managerial, and institutional levels of the organization must be able to develop according to the needs of the organization in realizing responsive services.

From some of the opinions above, the author tries to relate the factors that become a reference in measuring the capacity of the Nusa Kenari Regional Public Water Company in the drinking water service system in Teluk

Mutiara District, Alor Thompson Regency (2003). Several factors that have been mentioned by several experts such as Eisinger (2002), Horton et al. (2003), Christensen and Gazley (2008) conceptually can be grouped into three levels of organizational activity proposed by Thompson (2003) namely the technical level, managerial level and institutional level. When the opinion above is used as a reference in determining the factors that will be analyzed further in this study, considering the three concepts offered completely explain all levels of capacity to be studied with the results of the research and discussion as follows:

4.1 Technical Capacity

Technical capacity, including; human resources, infrastructure, technology and financing. Broadly speaking, the definition of Human Resources is an individual who works as a driver of an organization, both an institution and a company and functions as an asset that must be trained and developed. While infrastructure in general can be defined as all the basic structures and facilities needed for the implementation of a community or company activity, including physical and social. Furthermore, technology in the organization is defined as the means or devices needed by the organization in carrying out its activities. financing is funding support for the need or procurement of certain goods/assets/services whose mechanism generally involves three parties, namely the funding party, the provider of certain goods/assets/services, and the party utilizing certain goods/assets/services.

Morison (2001 in Riyadi, 2006:12) defines capacity development as a process to carry out a, or a series of movements, multi-level change in individuals, groups, organizations and systems in order to strengthen the adaptability of individuals and organizations. so that it can be responsive to changes in the existing environment where in the structure owned by PERUMDAM Nusa Kenari, Alor Regency, it can be seen that the PERUMDAM Nusa Kenari Organization is led by a director. The director is under the supervision of the Banwas (Supervisory Agency) which has changed its name to IRDA (Regional Inspectorate). One of the functions of the Regional Inspectorate is to supervise OPD-OPD in the region. Furthermore, the director and the inspectorate are responsible to the bupati .

At the micro level capacity development focuses on individuals and groups as a collection of individuals, capacity development focuses on providing professional and technical resources (Grindle, 1997; Dill, 2000; Horton et al., 2003) but in the authors' findings it is known that the structure there are problems such as in the General and Finance Section where there are often rejections of bills to the community because the customer community feels that the bill is not proportional to the volume of water obtained. Another problem is in the Sub - section of Bookkeeping and Reporting where the mastery of technology is not good enough. Furthermore, seen from the Engineering Section, especially in the Production and Processing Resources Subsection , the problems that arise are related to the quality of HR. People who are in this structure they do not have a good quality of expertise because they do not come from people with basic technical education.

The sub - section of technical planning and supervision also has problems, this has caused this section to only carry out the supervisory function. The next problem that arises is the Sub - section of Maintenance and Maintenance where an insufficient budget is available which usually causes this maintenance and maintenance activity to not run or continue to run but is only carried out as a temporary treatment because it uses makeshift techniques and equipment.

On the other hand, organizational capacity is sometimes defined as the internal quality of the organization, which consists of human and capital resources (Brinkerhoff, 2005) and on the other hand is considered a concept with both internal and external dimensions, for example external financial support which in the authors' findings from the perspective of In terms of financing, PERUMDA Water Drinking Nusa Kenari, Alor Regency has a profit/loss report when it comes to financial performance, the level of profitability is quite good. When viewed from the document data as shown above and the findings based on observations and interviews conducted by researchers related to financial performance, it was found that the level of profitability of PERUMDAM was quite good but still lacking because PERUMDAM Nusa Kenari was only able to provide benefits that could be seen from the ROE value of 9.82%.

Furthermore, based on the cash ratio, it is known that PERUMDA Airminum Nusa Kenari, Alor Regency has a low cash ratio to meet short-term obligations but based on the solvency ratio, the value obtained is 1091.10% . The solvency value >100% in Alor Regency is very large, meaning that the assets currently owned are still able to cover the long-term liabilities/debts of PERUMDA Water Drinking Nusa Kenari, Alor Regency.

It can be stated that organizational capacity development at the system level has not been effective so that PERUMDA Water Drinking Nusa Kenari, Alor Regency needs to develop a new strategic plan aimed at making the organization achieve its goals clearly and be able to design the organization to ensure efficiency, effectiveness, responsiveness and regional development programs will right on target when compiled based on

accurate data and needs in accordance with the field context. The data found by the authors can later be used as a reference for determining targets to be achieved (Horton et al, 2003)

4.2 Managerial Capacity

Managerial capacity, including; effective leadership, programs and management systems Dill (2000) as a macro structure where effective leadership is where the leadership is able to motivate subordinates to continue to strive for success, have a passion for work, be productive, result oriented and of course will have a positive impact on employees. the company or group being led. Effective leadership coupled with support from subordinates or work partners who are always motivated to move forward will certainly have a positive impact on the internal and external scope. Furthermore, the work program or commonly referred to as the activity agenda is an organizational activity plan that is prepared for a certain period of time and has been agreed upon by all organizational management. Generally, this work program is made in a very detailed and directed manner because it becomes a guideline in achieving organizational goals.

While the management system is a framework of processes and procedures used to ensure whether the company or organization can meet standards and carry out their duties to achieve organizational goals. The goals of a company or organization can be in the form of meeting customer quality requirements, complying with regulations both government regulations, state laws or regulations from customers and achieving goals/responsibility to environmental aspects.

Judging from effective leadership, based on the results of the study, it shows that the leadership in PERUMDAM Nusa Kenari is not so strong. This lack of strong leadership then causes the organization to move with a very slow movement of progress and even tends to run in place in a slumped condition.

The above statement appears based on the findings of the research which shows that the method of recruiting prospective leaders or directors at PERUMDAM Nusa Kenari has not been carried out properly because it does not include the requirement that those who can nominate themselves are those who have *basic* technical drinking water so that they have sufficient knowledge in making policy planning. .

The above concerns were later proven by the current leadership, where those who were elected and became directors were people with an economic *background* so they did not have enough knowledge related to drinking water problems. This has resulted in the 5 years of leadership not being able to answer all drinking water problems in Alor Regency which also resulted in suboptimal services to the community such as water service schedules that were not able to be planned properly so that many complaints and protests were received from the community. .

The results of the study show that there are several long-term programs such as the construction of Water Management Installations (IPA), and replacement of the main transmission and distribution pipes, procurement of tank cars, and the development of house connections, some of these programs aim to fulfill the distribution of clean water to people's homes.

4.3. Institutional Capacity

Institutional capacity includes: networking, involvement of other parties, political characteristics and market demands. Networking in this research is an effort to build relationships with other parties to run and achieve common goals. This is related to the involvement of other parties because it also involves the concept of networking in it. Political characteristics are political systems that are built within an organizational scope. Meanwhile, market demand is a desire accompanied by the ability to buy goods and services at a certain price and time. In this case, it is the community's desire to obtain clean water services from PERUMDAM Nusa Kenari.

a. Network

Based on the results of the study, it was found that the network and involvement of other parties that had been built by PERUMDAM was still a matter of dispute between PERUMDAM and also the village level government. In this case, PERUMDAM workers are usually contacted personally by the village to repair the problematic pipe network because the village government does not have enough skills for that. The pipe network that is usually requested by the village to be repaired is the clean water pipe network belonging to the village, not the PERUMDAM clean water pipe network.

In addition, the network and involvement of other parties built by PERUMDAM Nusa Kenari and the local government in this case the Regional Government of Alor Regency has not been so good and strong so that PERUMDAM Nusa Kenari seems to have not been given much attention by being given a capital injection so

that the existing budget at PERUMDAM Nusa Kenari is very low. limited and unable to finance the operational activities of PERUMDAM.

b. Involvement of Other Parties

PERUMDAM Nusa Kenari has been able to build a network and involvement of other parties with the Central Government through the Ministry of PUPR, as can be seen from the Construction of a Drinking Water Supply System (SPAM) in the Kalabahi Tengan Village from the Tombang Spring which has been built by the Ministry of PUPR through the NTT Regional Settlement Center. . The activity was carried out by the ministry / BPPW NTT itself by involving PERUMDAM Nusa Kenari with the Technical OPD for Housing and Land Areas in Alor Regency. After the SPAM facility is finished, there is only a handover from the ministry to the regional government, then the regional government will hand it over to PERUMDAM.

Networking and involvement of other parties by PERUMDAM together with the private sector, based on research results to date have never been carried out by PERUMDAM Nusa Kenari. One aspect of the lack of capital for PERUMDAM Nusa Kenari is the lack of capital participation from other parties. PERUMDAM Nusa Kenari only depends on the budget that will be provided by the Alor Regency Government, which until now has paid very little attention to PERUMDAM Nusa Kenari.

c. Political Characteristics And Market Demand

The current political characteristics in Alor Regency related to PERUMDAM Nusa Kenari can be seen from several points, the first point is how the political characteristics that occur in PERUMDAM Nusa Kenari are seen from PERUMDAM's relationship with the legislature. The political character that has existed so far has resulted in a capital injection vacuum from 2018 until now due to the weak network or political understanding between PERUMDAM Nusa Kenari and the Legislature. In fact, if you look at the people sitting in the legislature, not a few are people who care about drinking water or who are former PERUMDAM employees. There is an impression of mutual waiting and mutual misunderstanding between these two institutions.

The next point relates to how the political characteristics so far working in Alor Regency relate to PERUMDAM Nusa Kenari is in the recruitment of PERUMDAM Nusa Kenari employees in this case are contract employees. Contract employees so far who are able to fill it are people who have a relationship or emotional closeness with officials in the government or the legislature. In other words, the recruitment of contract employees at PERUMDAM Nusa Kenari is full of political affinity factors. The people who are selected and included in PERUMDAM are people who are "entrusted" from government figures. This then has a bad impact because the community in general is not involved and it is impossible to get into government organizations because the recruitment is internal to the government, so it is the people who are close to government actors who have access to enter. In addition, another bad impact is that employees who enter through political networks have a low level of compliance with organizations and leaders because they feel they have great power behind them.

is the political characteristics in terms of choosing a leader in the PERUMDAM organization, in this case the Director is also a separate problem . This recruitment is too political because it is carried out by the Secretariat of the Economy Section and other structural officials such as Assistant II. Meanwhile, people from the technical OPD are not involved. This causes the selected people to not be considered for their technical capacity or people who really understand the technical problems of PERUMDAM Nusa Kenari . In addition, people who are elected to become PERUMDAM leaders because they are generally open to people from the community who occupy these positions, the people who are always elected are people from the majority race or people who already have big names in the community. which will be selected.

5. CONCLUSION

Based on the results of the research and discussion described above, it can be concluded that the capacity of Nusa Kenari PERUMDAM in the drinking water service system in Teluk Mutiara District is still very low and still requires a lot of improvement in institutional capacity development to increase its service capacity. If each element that is in the organizational capacity (individual, organizational, system level) and organizational capacity (technical, managerial, and institutional) shows good symptoms then it is included in the supporting factor, but on the contrary if it shows bad symptoms then it includes in the inhibiting factor. If the supporting factors are more than the inhibiting factors, then the capacity of the organization is good, but on the contrary if there are more inhibiting factors in the organization, the capacity of the organization is still weak.

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RESEARCH PRODUCTIVITY IN THE FIELD OF SCIENCE & TECHNOLOGY OF GOVIND BALLABH PANT AGRICULTURAL UNIVERSITY, UTTARAKHAND: A SCIENTOMETRICS STUDY**Ambikesh Uniyal and Prof. Meera**

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ABSTRACT

This paper presents a scientometric analysis of 2679 publication data in the field of science and technology of the "Govind Ballabh Pant University of Agriculture and Technology" (GBPUAT) in Uttarakhand state. Data was extracted from the Scopus database for the time period of 10 years from 2012 to 2021 with the aim of analysing the growth rate and collaborative indicators in various aspects of performance, such as author productivity, authorship pattern, annual growth rate, relative growth rate, doubling time, highly cited papers, degree of collaboration, collaborative index, collaboration coefficient, etc. The study indicates that the overall published data at the Govind Ballabh Pant University of agriculture and technology has increased at an average annual growth rate of (5.15). The most productive year was 2021, with 337 (12.8%) publications. (Kumar, A) was the most productive author with 113 publications. Out of 2679 publications, 2200 (82.2%) were published in journal articles, followed by 148 (5.45%) in book chapters. Highest 66 documents were published in the "Indian Journal of Animal Sciences". The average value of the degree of collaboration (0.97) and the collaboration co-efficient (0.68) indicate that multi authorship is dominating, and the collaboration index (4.19), which means the maximum collaboration was between 4 and 5 authors.

Keywords: Scientometrics, Science & Technology, Annual Growth Rate, Relative growth rate, Degree of collaboration, Collaboration coefficient, collaborative index.

1. INTRODUCTION

This research output may be the result of intellectual labour contributed by students, faculty, research scholars, research scientists, decision makers, and others. People have become information apprehensive in selection as a result of the tremendous information explosion that has taken place everywhere; they do not know which parts of it can be assimilated and which parts can be dismissed. As a result, it has led to the development of a tool for the analysis of studies, which is used to first sort out the significant data and then analyses it according to the requirements and objectives of the research study. This has resulted in scientometric research. Scientometrics is the study of scientific publications to learn more about current and future scientific trends. Various quantitative and/or qualitative features of a publication can be analysed using scientometric approaches. It's a branch of science that looks at how scientific knowledge changes over time by counting how many publications are produced, how many times they are cited, and so on (Kumar, 2018).

2. LITERATURE OF REVIEW

Abbas & Hugar (2021) conducted scientometric analysis of the Documents published in India, in science and technology field for time period 2011 to 2020. "Web of Science" was used to extract data on various quantitative measure like, number of publications produced each year for selected time span, author productivity, the growth and spread of publications, and the top funding agency. The paper found that the amount of science and technology literature in India is growing. Chemistry has the most publications, followed by physics, engineering, and Mathematics. Kumar A. was found to be the most productive author in the technological field. Kumar S. and Kumar R. were also found to be very productive in the same field. "Research shows that the largest. Organization that gives grants is the Department of Science and Technology (DST) of the Government of India, followed by CSIR"

Another study was conducted by Mahala & Singh (2021) with an aim to examine the scientific research production of top Indian universities or time span five years from 2015 to 2019, Web of Science (WOS) database was used to retrieves the data. Journal articles, review papers, and proceeding papers totaled 26,173. Author observed that the Science research output has grown. DU has the most science publications. Multi-authored publications obtain more citations, according to the study.

Ansari et al. (2019) evaluated Kumaun University, Nainital's research production from 2000 to 2019. Scopus was used to collect data, and a total of 1574 records were found, with the most notable discoveries being that the maximum number of research publications in 2017 was 150, and the most chosen journal was Current Science.

In another scientometric study Kumar (2018), evaluated the 15-year research output of scientists at (ARIES), Nainital, by using the Web of Science database, Total 574 papers were extracted and 2013 was the most productive year, with 78 (13.59%) research articles published. Author noted ARIES, Nainital's productivity is constantly Increasing.

Further Bharti & Meera (2017) conducted a study to calculate the research productivity of two University DU and JNU respectively data was extracted using Thomson scientific database major finding includes that the Authors from the arts and humanities rarely worked together. Most have limited choices for writing papers individually 76 (47.20%) DU and 105 (53.85%) JNU publications used 0-5 references. . DU and JNU's humanities research is found to be low. Humanities citation index needs narrow-minded authors.

Another research study in the research productivity of the top ten universities in the state of Orrisa in Indian journals during the years 2004 to 2016, finds the number of research articles produced by each university, the types of referenced documents, and the distribution of cited journals by year, etc. These universities published a total of 1858 papers; 2012 was the most productive year, with 201 publications (Singh, 2017).

A study by Kumar et al. (2017) attempt an investigation to find the publications of Kurukshetra University. The paper examines 2361 Kurukshetra University publications from Scopus during 2006–15, focusing on growth, citation quality, share of national international collaborative papers, and subject-wise and department-wise distribution. The average growth rate and citation per paper were found to be 13.25% and 4.85, respectively.

Another article by Hiremath et al. (2016) looks at the growth of India's science and technology research from 1989 to 2014. It uses data from Web of Science to do it at all. The most publications were made in 2014, followed by 5,267 in 2013. The Bhabha Atomic Research Centre (BARC), in Mumbai, had the most articles with 4,117 (6.92%), and the Indian Institute of Science (IISc), in Bengaluru, had the most publications with 2,547.

A study by Gupta et al. (2013) looks into what India has done in S&T. Using data from the Scopus database for the 15-year period 1996–2011, the study looks at India's global publication share, growth rate, Quality of citations, Share of international collaboration and distribution of publications in both broad and narrow fields.

3. OBJECTIVES

The study was conducted keeping in mind the following objectives:

- To Find out the Document wise distribution of publications
- To Study the year wise growth of publication in the field of science and technology
- To analyze authorship Pattern, degree of collaboration, collaborative index, collaboration co-efficient and most prolific author.
- To Find the Annual growth rate, Relative growth rate and Doubling time of publications under study.
- To find out the most preferred journal used the scientists of GB Pant university of Agriculture and technology under study.
- To visualize the country wise collaboration.

4. METHODOLOGY

The current analysis was carried out utilizing the Scopus database, which has a massive amount of bibliographic and citation information for the publication. Under the affiliation search option the “Govind Ballabh Pant University of Agriculture and Technology” was searched for the time period 2012–2022, and science and technology subjects were chosen. The Query string was used to retrieve the required data for publication given below:

AF-ID “("Govind Ballabh Pant University of Agriculture and Technology" 60012351) AND “(LIMIT-TO (PUBYEAR , 2021) OR LIMIT-TO (PUBYEAR , 2020) OR LIMIT-TO (PUBYEAR , 2019) OR LIMIT-TO (PUBYEAR , 2018) OR LIMIT-TO (PUBYEAR , 2017) OR LIMIT-TO (PUBYEAR , 2016) OR LIMIT-TO (PUBYEAR , 2015) OR LIMIT-TO (PUBYEAR , 2014) OR LIMIT-TO (PUBYEAR , 2013) OR LIMIT-TO (PUBYEAR , 2012))” AND “(EXCLUDE (SUBJAREA , "MATH") OR EXCLUDE (SUBJAREA , "BUSI") OR EXCLUDE (SUBJAREA , "SOCI") OR EXCLUDE (SUBJAREA , "ECON") OR EXCLUDE (SUBJAREA , "ARTS") OR EXCLUDE (SUBJAREA , "PSYC"))”. A total 2679 records were

found during the study and the retrieved data was analyzed and tabulated by using MS Excel Application Software and vos viewer. The following Indicators were used to analyze the data:

- ❖ **Degree of collaboration (Dc):** Trend in authorship pattern of publication is investigated using the (Subramanyam, 1983) formula to determine the degree of collaboration.

$$\text{Degree of collaboration}(Dc) = \frac{Ns}{Nm + Ns}$$

- ❖ **Collaboration coefficient (CC) :** Ajiferuke et al.(1988) given the formulae for calculation of collaboration coefficient

$$cc = 1 - \left[\sum_{j=1}^A = 1 \left(\frac{1}{j} \right) fj \right] / N$$

$$\text{Calculation (CC)} = 1 - \frac{[f1 + (\frac{1}{2})f2 + (\frac{1}{3})f3 + (\frac{1}{4})f4 + \dots = (\frac{1}{k})fk]}{N}$$

Where,

fj = the number of j-authors publications published

N = the total number of research papers published in a science& technology during 2012-2021 in, GBPUAT (Uttarakhand)

k = the greatest number of authors per paper.

- ❖ **Collaborative Index:** For the calculation of collaborative index, formulae was given by lawani (1980)

$$\sum_f^A = \frac{1/fi}{N}$$

$$\text{calculation}(CI) = \frac{(f1)1 + (f2)2 + \dots \dots \dots (fk)k}{N}$$

Where, f1, f2, f3= number of authors

N = Number of publications in that year

- ❖ **Annual growth rate:** The formula used for calculating the Annual growth rate (Agr) was given by (kumar & kaliyaperumal 2015).

$$AGR = \frac{\text{End value} - \text{First value}}{\text{First value}} \times 100$$

- ❖ **Relative Growth Rate (RGR) & “Relative Growth rate expresses the increase in number of article per unit of time. The relative growth rate and doubling time”** was calculate using the model given by (Mahapatra1985).

$$RGR = \frac{W2-W1}{T2 - T1}$$

Where,

RGR= “growth rate over the specific period of interval”

W1= “Loge (natural log of initial number of publications)”

W2= “Loge (natural log of final number of publications)”

T1- “the unit of initial time”

T2- “the unit of final time”

- ❖ **Doubling time (Dt)**

The formula of corresponding Dt for contributions and pages measurement (Baskaran, 2021).

$$DOUBLING\ TIME(Dt) = \frac{0.693}{R}$$

5. DATA ANALYSIS AND INTERPRETATION

5.1 Document type, distribution of research publications

Table 5.1 : Document Wise Distribution Of Publication And Fig.1

Document Type	Documents	%
Article	2200	82.22
Book Chapter	148	5.45
Conference Paper	145	5.37
Review	144	5.37
Note	13	0.48
Book	9	0.33
Letter	8	0.29
Editorial	7	0.26
Erratum	4	0.14
Short Survey	1	0.03
	2679	

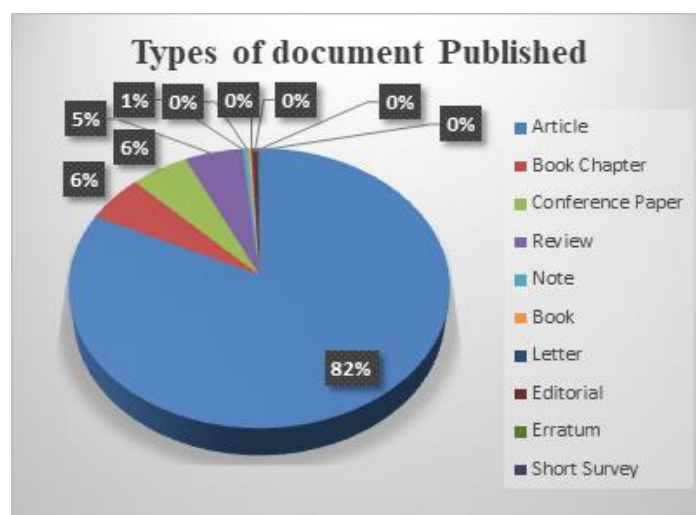


Table. 5.1 illustrates the Document type wise distribution of research publications from the marked study period of study i.e. (2012-2021).The above table shows that the maximum 2200(88.22%) of publications were published in the form of Article, followed by book chapter with 148(5.45%) publications and 145(5.37%) published in conference papers.

5.2 Highly Preferred Journals by Scientist

Table: 5.2 highly preferred journals by scientist

Rank	Journal Title	Documents	Percentage	Country of Origin
1	“Indian Journal Of Animal Science”	66	14.0%	India
2	“Indian Journal Of Agricultural Sciences”	54	11.4%	India
3	Veterinary Practitioner	51	10.8%	India
4	Ecology Environment And Conservation	49	10.4%	India
5	Indian Veterinary Journal	48	10.1%	India
6	3 Biotech	44	9.3%	Switzerland
6	Indian Journal Of Agronomy	44	9.3%	India
6	Indian Journal Of Animal Research	44	9.3%	India
7	Journal Of Entomological Research	37	7.8%	India
8.	Indian Journal Of Horticulture	36	7.6%	India
		Total= 473		

The leading journals in which the greatest number of articles have been published are listed in above Table 5. 2 which indicates the "Indian Journal of Animal Sciences" had the highest number of articles published i.e. 66 (14%), followed by the "Indian Journal of Agricultural Sciences." i.e.54 (11.4%),The publication "veterinary Practitioner" had the third greatest number of articles published, which is 51 (10.8%).

5.3 Subject wise Distribution of Publication

Table: 5.3 subject wise distribution of publications

S.no	Subject area	Documents	%
1	"Agricultural and Biological Sciences"	1400	36.05%
2	Environmental Science	462	11.89%
3	Engineering	438	11.28%
4	"Biochemistry, Genetics and Molecular Biology"	437	11.25%
5	Veterinary	304	7.83%
6	"Materials Science"	223	5.74%
7	Chemistry	171	4.40%
8	Physics and Astronomy	153	3.94%
9	Chemical Engineering	148	3.81%
10	Computer Science	148	3.81%
	Total	3884	100.00%

Table 5.4 displays order of the Top ten subject areas in which GBPUAT top ten publications related to science and technology were distributed during the course of the study period. The topic field of "agricultural and biological science" contains the greatest number of documents i.e. 1400 (36.05%), followed by "environment science" i.e. 462 (11.89%) and engineering 438(11.28%).

5.4 Highly cited papers

Table 5.2 highly cited paper

S.no	Title	Authors	Source title	Year	Cited by	Document Type
1	"Lignocellulosic agriculture wastes as biomass feedstocks for second-generation bioethanol production: concepts and recent developments"	Saini, J.K... [et al.]	3 Biotech	2015	536	Review
2	"Silver nanoparticle-mediated enhancement in growth and Antioxidant Status of Brassica juncea"	Sharma, P...[et al.]	Applied Biochemistry and Biotechnology	2012	297	Article
3	"Industry 4.0 technologies and their applications in fighting COVID-19 pandemic"	Javaid, M... [et al.]	"Diabetes and Metabolic Syndrome: Clinical Research and Reviews"	2020	272	Article
4	"Internet of things (IoT) applications to fight against COVID-19 pandemic"	Singh, R.P... [et al.]	"Diabetes and Metabolic Syndrome: Clinical Research and Reviews"	2020	256	Article
5	"Role of Secondary Metabolites and Brassinosteroids in Plant Defense Against Environmental Stresses"	Bartwal, A... [et al.]	"Journal of Plant Growth Regulation"	2013	225	Review
6	"Gold-nanoparticle induced enhancement in growth and seed yield of Brassica juncea"	Arora, S... [et al.]	Plant Growth Regulation	2012	220	Article
7	"Gene duplication as a major force in	Magadum,	Journal of	2013	196	Article

	evolution”	S.... [et al.]	Genetics			
8	“Acclimation and Tolerance Strategies of Rice under Drought Stress”	Pandey, V.& Shukla, A.	Rice Science	2015	178	Review
9	“Compost: Its role, mechanism and impact on reducing soil-borne plant diseases”	Mehta, C.M... [et al.]	Waste Management	2014	162	Article
10	“Abiotic stress tolerance in plants: Myriad roles of ascorbate peroxidase”	Pandey, S...[et al.]	Frontiers in Plant Science	2017	159	Review

Table 5.4 Indicates the top ten (10) highly cited paper, the paper entitled “Lignocellulosic agriculture wastes as biomass feedstocks for second-generation bioethanol production: concepts and recent developments” which has obtained highest citations i.e. 536, Published in 3 Biotech in 2015 followed by “Silver nanoparticle-mediated enhancement in growth and Antioxidant Status of Brassica juncea” with 297 citations, published in “applied biochemistry and bio technology journal” in 2012.

5.5 Growth Studies: Year wise Productivity, Annual Growth, Relative Growth, Doubling time

The growth study analysis will depicts the expansion of documents generated in the science and technology Field at “Govind Ballabh Pant University of agriculture and technology” from 2012 to 2021. It also forecasts future growth tendencies. Some of the growth strategies are detailed more below.

TABLE 5.5 YEAR WISE PRODUCTIVITY, ANNUAL GROWTH RATE, RELATIVE GROWTH RATE, AND DOUBLING TIME

YEAR	DOCUMENT PUBLISHED	CUMULATIVE	PERCENTAGE	AGR	W1	W2	RGR	Dt
2012	238	238	8.88 %	-	-	5.47	-	-
2013	264	502	9.85 %	10.92	5.47	6.22	0.75	0.93
2014	243	745	9.07 %	-7.95	6.22	6.61	0.39	1.76
2015	248	993	9.26 %	2.06	6.61	6.90	0.29	2.41
2016	287	1280	10.71 %	15.73	6.90	7.15	0.25	2.73
2017	316	1596	11.80 %	10.10	7.15	7.38	0.22	3.14
2018	277	1873	10.34 %	12.34	7.38	7.54	0.16	4.33
2019	227	2100	8.47 %	18.05	7.54	7.65	0.11	6.06
2020	242	2342	9.03 %	6.61	7.65	7.76	0.11	6.35
2021	337	2679	12.58 %	39.26	7.76	7.89	0.13	5.15
	Total = 2679			Mean 5.15			Mean 0.27	Mean 3.65

FIGURE: 2, ANNUAL GROWTH, EXPONENTIAL GROWTH RELATIVE GROWTH, DOUBLING TIME

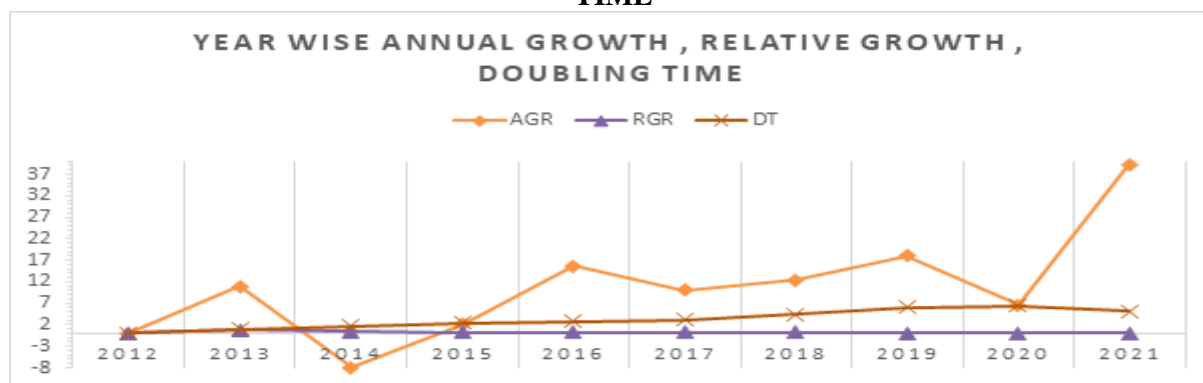


Table 5.5 shows the year wise productivity, annual growth rate, relative growth rate and doubling time. As per year wise productivity, documents are split up by year from 2012 to 2021, maximum 337 publications were identified in the year 2021, which was followed by 316 in 2017 and a lowest of 227 in 2019. Graph in fig. 2 also shows that the number of publications has been going up over the time period of the study. Further Table 5.5 clearly demonstrates that. In 2021, publications grew at a maximum annual growth rate of 39.1 percent,

followed by an 18.09 percent annual growth rate in 2019. During the year 2011, publishing growth was at its slowest rate. "Relative Growth rate expresses the increase in number of article per unit of time. Table 5.5 and figure2 shows that there is decreasing trend of Relative growth rate i.e. 0.75 in the beginning year and 0.13 in end year and doubling times indicate the time taken to double the value of publication. Doubling time was found 3.65 years.

6. Most Productive Author

Table: 6 Highly Productive Authors during 2012-21

S.no	Author	No. of Publications	6	Total citations Received	Average citations per paper	**H index
1	Kumar, A.	113	23.06	1538	13.61	23
2	Srivastava, P.C.	58	11.84	436	7.52	10
3	Prakash, O.	50	10.20	182	3.64	8
4	Goel, R.	45	9.18	462	10.27	14
5	Pant, A.K.	40	8.16	154	3.85	8
6	Singh, S.B.	39	7.96	336	8.62	9
7	Jaiswal, J.P.	37	7.55	500	13.51	10
8	Kumar, M.	37	7.55	729	19.70	15
9	Sirohi, R.	37	7.55	320	8.65	14
10	Gope, P.C.	34	6.94	493	14.50	11
Total		490	100	5150	10.51	

** H-index is shown in table is retrieved from scopus database

Table 6 Reveals the most productive authors. Highest proliferated productivity was shown by the author kumar, A (citation 1538) i.e. 113. Second highest Productivity by author Srivastava, pc (citation 436) i.e. 58. Followed by author Prakash, O (citation 182) i.e. 50 and goel, R. (citation 436) i.e. 58.

7. Year wise Authorship Pattern

TABLE: 7 YEAR WISE AUTHORSHIP PATTERN

Year	Single	Double	Three	Four	Five	> Five	TP
2012	7	47	66	57	31	30	238
2013	9	54	68	49	39	45	264
2014	5	56	58	55	33	36	243
2015	11	62	52	52	34	37	248
2016	7	57	77	67	38	41	287
2017	10	72	72	55	47	60	316
2018	11	67	73	50	26	50	277
2019	5	43	50	44	26	59	227
2020	4	40	39	41	32	86	242
2021	7	47	50	55	52	126	337
Total	76	545	605	525	358	570	2679
%	2.84	20.34	22.58	19.60	13.36	21.28	100.00

Table 7 displays the year-by-year authorship pattern that was contributed by the research fraternity of the GBPUAT University of Agriculture and Technology. It was discovered that out of a total of 2679 articles, the greatest number, 605 (22.58 percent), were produced by three authors, 570 (21.28 percent), were contributed by more than five authors, and 545 (20.34 percent) were contributed by two authors.

8. Collaborative Indicators: Degree of collaboration, collaborative co-efficient, collaborative index

Table: 8 DEGREE OF COLLABORATION, collaborative co-efficient, collaborative index

Year	Single Author (Ns)	Multiple Author (Nm)	Total (Nm+Ns)	Degree of collaboration (C=Nm/Nm+NS)	Collaborative Co-efficient (cc)	Collaborative index (cI)
2012	7	231	238	0.97	0.68	3.8

2013	9	255	264	0.97	0.64	3.9
2014	5	238	243	0.98	0.71	3.9
2015	11	237	248	0.96	0.65	3.8
2016	7	280	287	0.98	0.63	4
2017	10	306	316	0.97	0.65	4
2018	11	266	277	0.96	0.70	3.9
2019	5	222	227	0.98	0.76	4.5
2020	4	238	242	0.98	0.73	4.9
2021	7	330	337	0.98	0.74	5.2
Total	76	2603	2679	0.97	0.68	4.19

The data presented in table 8 highlights the degree of collaboration, collaborative index, collaboration co-efficient in publication by the authors of the “Govind Ballabh Pant University of Agriculture and Technology”. The value of degree of collaboration ranges from 0.96 to highest 0.98, average value of collaboration was 0.97 among authors. The collaboration coefficient value has been increasing over the year with maximum in year 2019 and minimum the year 2016 and average value was 0.68. The average value of collaborative index was found 4.19 which means the most of the collaborations are with four to five authors.

9. Top Collaborative Countries

Table 9 Top Ten Collaborative Countries

s.no	countries	No. of Publications
1	India	2682
2	United States	54
3	South Korea	21
4	China	18
5	Hungary	18
6	Georgia	15
7	Viet Nam	15
8	United Kingdom	12
9	Canada	11
10	France	11

Figure: 4 network visualization map of country wise collaboration

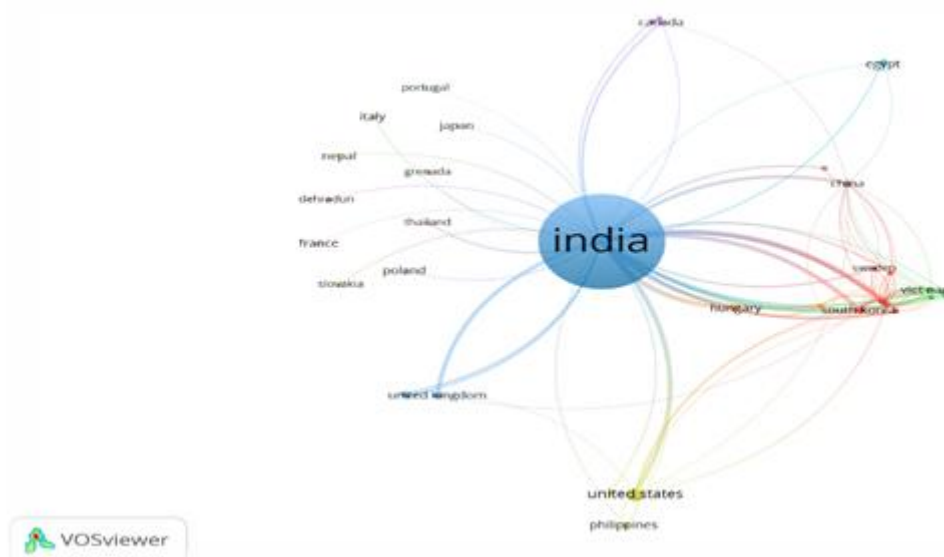


Table 9 shows the top 10 countries, who collaborates with the research fraternity of “Govind Ballabh Pant University of Agriculture and Technology (GPUAT), Uttarakhand.” It was revealed that research fraternity of (GPUAT) have the highest collaboration of 2682 with authors of Indian institution, for the period 2012-2021, while the second highest collaboration was with United States (54) followed by south korea (21) and china (18).

Fig 4 shows the collaborative network of top ten collaborative countries publishing more than ten documents indicates blue was the largest cluster which showing the largest collaboration of GBPUAT authors are with other Indian authors, followed by blue coloured collaborative links with United States, south korea and china

10. CONCLUSION

The study uncovers the some fascinating facts about the output of the “Govind Ballabh Pant University of Agriculture and Technology” for the time period 2012–2022 in science and technology. Total 2679 document were published during the period of study, year 2021 was the highest publication year with 337(82.22%) documents. The most productive author was Anil,k with (113)documents and (1538) citations. The subject “Agricultural and Biological sciences” was discovered to be having the highest number (1400) of documents followed by the “Environment science” (462) and Engineering (438) documents. The average value of the degree of collaboration was found (0.97) and the collaboration co-efficient (0.68) indicate that multi authorship is dominating, and the collaboration index was (4.19), which means the maximum collaboration was between 4 and 5 authors. The Annual growth rate was seen in fluctuating trends. 2200 (82.2%) were published in journal articles followed by 148 (5.45%) in book chapters. Highest 66 documents were published in “Indian journal of Animal Sciences”. Research fraternity of (GPUAT) have the highest collaboration of 2682 with authors of Indian institution, for the period 2012-2021, while the second highest collaboration was with United States of America (54) followed by south korea (21) and china(18) Overall performance of “Govind Ballabh Pant University of Agriculture and Technology” is found to be satisfactory.

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COMPARATIVE STUDY ON SCRIPT RECOGNITION USING DEEP LEARNING AND GABOR FEATURES

Shreesha S K¹ and Dr. Anita H B²¹Department of Computer Science, PES University, Bengaluru, Karnataka, India²Department of Computer Science, CHRIST (Deemed to be University), Bengaluru, Karnataka, India**ABSTRACT**

Text classification and recognition play an essential role in natural language processing with many applications, such as web search, recovery of information, grading and classification of documents, etc. In recent years, there has been a rapid growth in this area in terms of speed and accurate classification by applying some innovative techniques. The anticipated work does the comparative study for Indic script classification by utilizing two different approaches. In the first approach, existing Gabor filter method was applied to extract features from images and a KNN classifier used to classify the script and achieved average accuracy of 92.11% for bi-script classification. A deep neural network model called the VGG model was used in the second approach and achieved 92.27% test accuracy for multiscript classification. Total number of seven Indian scripts and 700 images are considered for the experiment.

KeyWords: OCR, Deep Learning, Gabor filter, KNN.

1. INTRODUCTION

Text recognition algorithms traditionally follow segmentation-based approaches that work by segmenting the lines to words and, finally, by using classifiers to recognize characters. In this proposed work, seven Indian language scripts are considered. The recognition of text from document images has numerous applications. The extracted texts can later convert to other language which will help a person who does not understand the script on any particular document. For example, many government documents are written in various regional languages of India. If the recognized text from the document converts into official language like English, it will have validity in more places. If the recognized text could be converted into sound signal format, it will help the blind people to understand it.

Due to its high efficiency and less need for engineered functions, natural language processing (NLP) has benefited greatly from the resurgence of deep neural networks (DNNs). Two key DNN architectures are: the convolutional neural network (CNN) and the recurring neural networks (RNN). CNNs are generally hierarchical and RNN architectures are sequential. The CNNs are good for extracting locally and position-invariant features for classification. A major reason for CNNs is its speed.

The proposed work experimented using two methods. In first method, features are extracted using gabor filter and classification with KNN. In the second method CNN is used for feature extraction and classification. The paper is organized in following sections. Section 2 deals with summarization of previous works. The proposed methods are described in Section 3. Section 4 provides the results and analysis of experiments. The entire work is concluded in Section 5.

2. LITERATURE REVIEW

In [1], a multi-functional approach to identifying the script type of the collection of handwritten document was proposed. The authors considered eight popular Indian scripts. Gabor filters were used in bi-script identification schemes for extraction of features, while Gabor was combined with DCT/wavelets for tri-script cases. Experiments were conducted to test the accuracy of the recognition of the system proposed for bilingual scripts at the line level and later to include tri-lingual scripts using KNN classifier. Recognition rate of 100% for bi-scripts was achieved in comparison to tri-script recognition results. To identify a type of script from a multi-script document, a multiple feature based approach was presented in [2]. In the recognition phase, the Neural Network classifier was used. The average of 97% recognition rate was obtained from the computed features. Experiments were also conducted at the line level by taking only a part of the line and achieved 100% recognition rate with KNN classifier. The authors [3] made a comparative analysis on different types of stemmer and other pre-process steps in the Gujarati language, as well as diverse methodology and features extraction techniques. A script identification study for printed document images based on morphological reconstruction was undertaken in [4]. This system was developed using 609 scanned images of English, Hindi, Kannada and Urdu scripts. They achieved classification accuracy of 90.67 %, 84.29% and 81.42% for Kannada, English and Hindi scripts respectively with an overall accuracy of 85.46%. The efforts of Arabic researchers and their related and adapted languages were present in [5]. They observed that by using evolutionary

techniques, OCR problems can be resolved and directed to their mature level by Sindhi Language and Arabic script as already accomplished by Latin OCRs. The authors [6] discusses issues relating to language identification, script identification and font-cum-style recognition – three key fields of document analysis. Finally, with the extensive use of pen-computing technology, they assumed that online script identification techniques can become extremely useful. The same observation applies in video-based text documents for automatic script identification technology. The authors[7] presented a survey on the various techniques used to extract and classify multilingual numerals. Comprehensive work was carried out in the Indian language to recognize characters and numerals. They made the survey by analysing 15 research works based on different feature extraction techniques and languages. The research presented in [8] focuses on the problem of extraction and recognition of digits (Roman as well as Gurmukhi). The researchers achieved highest recognition accuracy using DDD features with KNN classifier, which were 95% for Roman numbers and 92.6% for Gurmukhi numbers. A research[9] utilized a handwritten Malayalam character recognition system that combines extended regional zone-based features with structural features. The accuracy obtained for a feature size of 126 was 95.4 percent, while the efficiency obtained for a feature vector of size 9 was 78.67 percent. Some classification labels influence recognition in such a way that the 8 class vowel recognition achieves 98.72 percent accuracy, while the consonant recognition achieves 95.68 percent for the feature vector of size 126. An OCR system which can include the Gujarati and English scripts is proposed in [10]. They used template matching classifier. The normalized feature vector was used for classifying the digits of English and Gujarati. The Gujarati digits had an average 98.30 percent rate and the English digits at character level had 98.88 % classification rate. The online HCR work review was presented on Indic scripts [11]. Although a lot of research had been carried out in the field of HCR, recognition algorithms still have not been fully recognized with 100% accuracy. The researchers [12] extracted 13 different features to classify texts from news video images. The Random Forest, Simple Logistic and J48 classification algorithms provided better results with average success rate of 98%. The authors [13] utilized both spatial and frequency features to classify and recognize Kannada scripts from the scanned book cover images. The KNN classifier showed 94% classification accuracy. The researchers [14] presented handwritten hand-written script identification of directional discrete cosine transforms (D-DCT). The classification of word was conducted with bi-scripts, tri-scripts and scripts and the identification accuracies were achieved respectively 96.95%, 96.42% and 85.77% on average. The authors [15] analyzed the use of discriminating features (aspect ratio, strokes, eccentricity, etc) to determine word-level scripts in 3 bilingual documents representing Kannada, Tamil, and Devnagari that contain English numerals. The proposed algorithm was tested in 2500 font styles and sizes with sample words. A script identification technique from document images was proposed in [16]. The method used components and objects for the vertical and horizontal run of one single text line for distinguishing 3 Indian scripts: Kannada, Hindi and English. The proposed system achieved a precision of 93% for Hindi script identification, 90% for English and 86% for Kannada script identification process. As per our knowledge, very few researchers worked on comparison of CNN with conventional methods for script recognition. In the proposed work, two methods CNN and gabor filters are experimented for the classification of Indic scripts. Both the methods tested on the same data set. Comparative study of deep learning models CNN, ANN Transfer learning for devanagari handwritten character recognition carried out [17]. In [18] and [19] researchers applied convolutional neural networks for Indian (namely English, Devanagari and Urdu) and Arabic character recognition respectively.

3. METHODOLOGY

3.1. Data Collection and pre-processing

The dataset was built up by collecting 700 handwritten images from various sources. Out of 700 images, 400 belong to South Indian and 300 belong to North Indian scripts. The scripts were written using the pen in A4 sheets. All images were converted into gray scale format with 300 dpi. The lines from the images were manually extracted. The median filtering techniques used to remove the pepper noises. The binarization process was done by applying the Ostu's global thresholding techniques.

3.2. Feature Extraction

In the first approach, Gabor Filter based techniques applied in Matlab to extract the features from the dataset. The equations to calculate a two dimensional Gabor function $G(x,y)$ and Fourier Transform are,

$$G(x,y) = \left(\frac{1}{2\pi\sigma_x\sigma_y} \right) \exp \left[-\frac{1}{2} \frac{x^2}{\sigma_x^2} + \frac{y^2}{\sigma_y^2} + 2\pi Wx \right]$$

$$F(u,v) = \exp \left(-\frac{1}{2} [(u - W)^2 / \sigma_u^2 + v^2 / \sigma_v^2] \right)$$

Where W indicate the center frequency of $F(u,v)$ along with u axis. The σ_x and σ_y denotes the spatial extend along with x and y axes, meanwhile σ_u and σ_v indicates the bandwidth along with x and y axes. This work is published in [2].

3.3 Deep Learning

A deep learning model called VGGNet used in second approach for text recognition. The model requires four parameters such as height, width, depth and classes from the input images. The depth indicates the number of channels in an image and classes is the category/class number. In our training script, we used these parameters to mount the model with an input volume of $96 \times 96 \times 3$. At the end of the model optional argument, finalAct with softmax. It helps to classify multi-labels with Keras by changing the value from softmax to sigmoid. This model contained two convolutional blocks in which included convolutional layers, RELU (Rectified Linear Unit) activation layer and pooling layers. The convolutional layer contained 32 filters and a 3×3 kernel. Batch normalization, pooling and dropout by 25 percent are considered. Dropout is a process by which nodes from the current layer to the next layer were removed randomly. This random disconnection process helps the system to reduce overfitting as no node in the layer can predict a particular class, edges, object or corner. The different data augmentation techniques such as rotation, width shift, Height shift range, shear range, zoom range, horizontal flip, fill mode were applied.

3.4 Script Recognition

In the first approach, KNN classifier is applied to recognize the text using the extracted features from Gabor filter function. In deep learning based approach, untrained data fed into the trained model to predict its class. The top most probability of class will be considered as the predicted class.

4. RESULTS AND ANALYSIS

The performance of proposed model using Gabor filter extraction techniques were determined by applying the KNN classifier for text recognition. The training was happened by splitting the 60% of images in the dataset for training and remaining 40% for testing purposes. The average accuracy of 92.11% is achieved using gabor filters for bi-script classification. The results of recognition experiments are given in Table 1.

Table 1. Results obtained using Gabor Filter

Scripts	Recognition(%)
North & South	100
Kannada & Tamil	100
Kannada & Malayalam	100
Kannada & Telugu	100
Hindi & Gujarati	100
Hindi & Punjabi	100
Gujarati & Punjabi	82.5
Tamil & Telugu	83
Tamil & Malayalam	80.5
Malayalam & Telugu	83

The deep learning model was trained using the Adam optimizer with learning rate of $1e-3$ for 75 epochs. A total of 685 images were used to build the model. It later did split 80% for training and 20% for validation purposes. The remaining 15 untrained images were used to test the model. The graph of training and validation of data is given below in Fig 1.

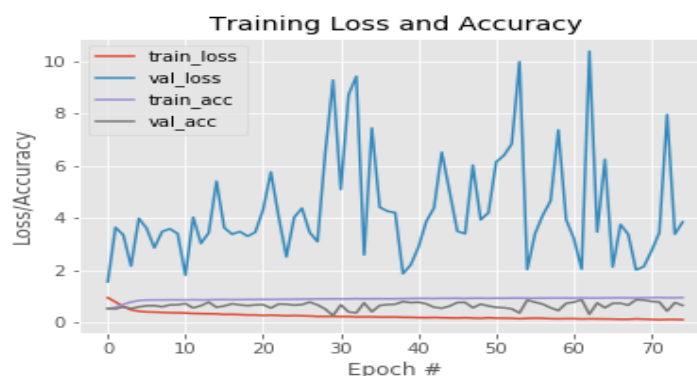


Fig 1. The training result of deep learning model

Table 1 shows that the proposed Gabor Filter based approach performs better accuracy in kannada bi-script classification compare to other sbi-script classification. The graph of deep learning model shows that the model is slightly went to overfitting. The reason behind the overfitting was the lack of data. A deep learning model require huge amount of data to be trained well. The overfitting controlled to an extent by using the data augmentation. The model achieved 95.38% training accuracy, 90.58% validation accuracy and 92.27% testing accuracy.

5. CONCLUSION

The main aim of this paper work was to do a comparative analysis on test recognition using two different approaches. In first approach, gabor filter used for extracting features and KNN classifier for recognition of text. The proposed work achieved recognition rate of 92.11% using Gabor filter. In the second approach, VGG network architecture is experimented. This customized deep learning model achieved 92.27% test accuracy with a less amount of data. This indicates Deep learning performs better when compare to gabor filter. However, this work can be taken as an initiative to our future experiments with huge dataset.

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A STUDY ON SKILL DEVELOPMENT IN INDIA

Manisha N. Ajara¹ and Dr. Ashok S. Luhar²Research Scholar¹ and Research Guide², D.T.S.S. College of Commerce, Malad East, Mumbai**ABSTRACT**

Assimilation of skill development and education is essential for skilling to take wings. Skills and knowledge are the motivating force of the growth and community development of any country. They have become even more important given the increasing pace of globalization and technological changes provide both challenges that are taking place in the world. Skill building can be view as a tool to improve the efficiency and contribution of labor to overall production. It is an important tool to push the production possibility front line outward and to take growth rate of the economy to a higher route. Skill building could also be seen as a device to empower the individual and improve their social acceptance.

Hence, for the further research it is necessary to understand the base and elements of skill in detail.

Keywords: Skill Development, Types of Skills, Classification of Skills, Skill Development Ecosystem in India, Skill Development Model.

INTRODUCTION

Skill in the simplest sense is the ability to do something well. It is something which creates expertise. A skill is the capacity to carry out a task with pre-determined outcome often within a given time, energy, or both. It is an ability of doing job well, especially because one has practiced it over period of time. It is different from skill set, because skill set is a person's range of skills or abilities. Hence, every job consists the range of skills i.e. skill set. One single or particular skill cannot satisfy a given job it requires different skills to complete one job.

Hence the Skills on vocational training, education and lifelong learning are essential pillars of employment of workers, employability and sustainable enterprise expansion.

Skills versus knowledge: Knowledge means learning concepts, principles and information regarding particular subjects by a person through books, media, encyclopedias, academic institutions and other sources. Skill refers to the ability of using that information and applying it in a situation.

Skill versus ability: Abilities are natural or inbuilt whereas skills are learned behaviours

RESEARCH METHODOLOGY

The researcher has used secondary data published in various journals, websites and reports.

OBJECTIVES OF THE STUDY

1. To understand classifications of skills.
2. To explore skill development ecosystem in India.
3. To understand nodal bodies for skill development in India.
4. To understand best practices of skill development in Germany, Australia and China.

CLASSIFICATION OF SKILLS

Skills development is understood in broad terms, covering the full series of life stages. Basic education gives each individual a basis for the development of their potential, laying the foundation for employability. Initial training provides the core work skills, general knowledge, and industry based and professional competencies that facilitate the transition from education into the world of work. Lifelong learning maintains individuals' skills and competencies as work, technology and skill requirements change. Different countries focus on different elements as they see relative strengths and weaknesses in their own skills development systems, and as they learn more about innovations and experience in other countries.

Skills can often be divided into domain-general and domain-specific skills. For example, in the domain of work, some general skills would include time management, teamwork and leadership, self-motivation and others, whereas domain-specific skills would be useful only for a certain job. Skill usually requires certain environmental stimuli and situations to assess the level of skill being shown and used.

Skill development will remain a dream if carried out in isolation through centers alone. It has to be imparted in schools alongside academic.

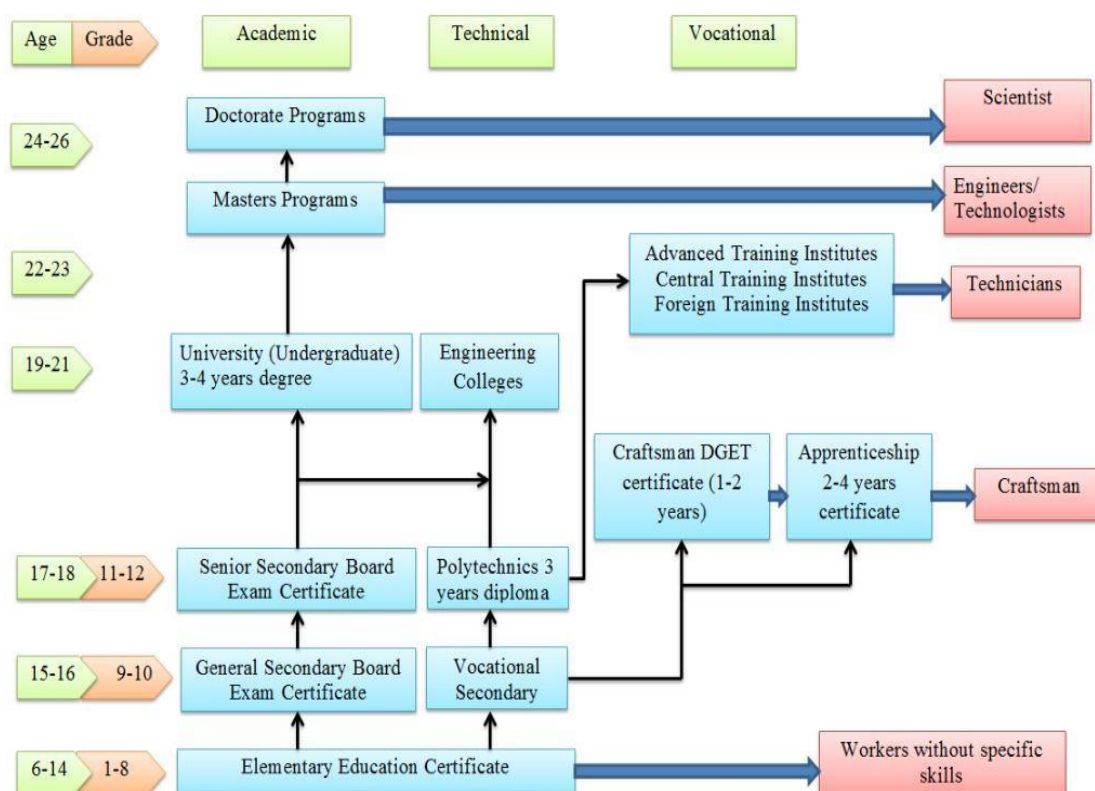
1. **Basic / Fundamental Skills:** Basic skills often include the verbal, mathematical and reasoning skill. Verbal skills include Listening, Speaking, Reading and Writing (LSRW) that ensures better communication in a team. It helps in facilitating group activities, integrating and conveying information etc.
 - a. Mathematics: to perform basic mathematical computation
 - b. To approach practical problems by choosing appropriately from a variety of mathematical techniques
 - c. To discover a rule or principle underlying the relationship between two or more objects and apply it when solving a problem.
 - d. Verbal: An ability to read, comprehend and arrive at logical understanding of situations.
 - e. To enhance vocabulary and thus improve communication.
2. **People – related Skills:** These skills focus on team development and performance. Team development refers to the ability to help the team form and finish a goal. Team performance refers to the team dynamics and working to maintain relationships.
 - a. Working well in a group and ability to establish good rapport
 - b. Empathizing with others.
 - c. Giving directions and guidance to others.
 - d. Identifying sources of conflict among people.
 - e. Resolving conflicts
3. **Conceptual / Thinking Skills:** Skills that include the ability to recognize and define problems, invent and implement solutions, and track and evaluate results are said to be conceptual skills.
 - a. Ability to think differently
 - b. Identifying problems & solving problems
 - c. Identifying new ways to solve problems
 - d. Contributing to group problem-solving
 - e. Willing to share and take responsibilities
4. **Personal Skills and attributes:** These refer to the skill that individual need to develop in order to be successful both in their personal and professional life. Personal skills requires that individuals need to understand and manage change, stress and balance emotions. As far as employers are concerned they look for individuals with high self confidence and high self esteem.
 - a. Maintaining a high energy level
 - b. Ability to step out and help others
 - c. Responding positively to constructive criticism
 - d. Functioning well in stressful situations
 - e. Ability to work independently
5. **Skills related to the business world or Work Skills:** Attitude that promote and encourage change are essential for work skills. These behaviors include risk taking, creativity, visioning, and the ability to conceptualize.
 - a. Making decisions on the basis of thorough analysis of the situation
 - b. Recognizing the effects of decisions made
 - c. Integrating strategic considerations in the plans made
 - d. Setting priorities and allocating time efficiently
 - e. Managing/overseeing several tasks at once and meeting deadlines
 - f. Taking reasonable job-related risks

- g. Identifying potential negative outcomes when considering a risky venture
6. **Employability skills:** generally divided into three skill sets: (a) basic academic skills, (b) higher-order thinking skills and (c) personal qualities. The three skill sets are typically broken down into more detailed skill sets:
- Basic Academic Skills:** like Reading, Writing, Science, Math, Oral, Communication and Listening skills.
 - Higher-Order Thinking Skills:** like Learning, Reasoning, Thinking, Creatively, Decisions Making and Problem Solving skills.
 - Personal Qualities:** like Responsible, Self Confidence, Self-Control, Social Skills, Honest, Integrity, Adaptable and Flexible, Team Spirit, Punctual and Efficient, Self-Directed, Good Work Attitude, Cooperative, Self-Motivated, Self-Management and Negotiation skills.
 - Technology Skills:** like basic IT skills, Applying IT in humanities and Being willing to learn new IT skills
 - Leadership skills:** Excellent interpersonal skills, Motivate and inspire others, Planning and decision making, Coordinate team work, Value team members and promote their development and Initiative skills.

SKILL DEVELOPMENT ECOSYSTEM IN INDIA

The skill development ecosystem in India is complex, large and diverse. It provides varied levels of skills across an extremely diverse population. Skill development in India can be bifurcated into Education and Vocational Training. The exhibit below presents the broad framework of Skill Development in India.

INDIA'S EDUCATION AND SKILL DEVELOPMENT STRUCTURE



Source: Skill Development in India.

Elementary, secondary and higher education is governed by the Ministry of Human Resource Development. University and Higher Education caters to all college education (Arts, Science, Commerce, etc.), while engineering education, polytechnics, etc. fall under Technical Education. University Grants Commission (UGC) is the nodal body governing funds, grants and setting standards for teaching, examination and research in universities and the All India Council for Technical Education (AICTE) is the regulatory body for Technical Education in India.

Skills in India are acquired through both formal and informal channels. Formal vocational training is imparted in both public and private sector. Some of the major channels of formal vocation training include the

government-run Industrial Training Institutes (ITIs), privately operated Industrial Training Centres (ITCs), vocational schools, specialized institutes for technical training, and apprenticeship training by the industry. The private sector participation has been on a rise lately, but the sector continues to be dominated by the public sector. Informal training on the other hand refers to experiential skills acquired on the job.

At the central level, the nodal institution for vocational training is the Director General of Employment & Training (DGET) under the Ministry of Labour and Employment. The DGET is responsible for formulating policies, establishing standards, granting affiliation, trade testing and certification, and matters connected to vocational training and providing employment services. The National Skill Development Council (NSDC) - now a part of the newly created Ministry of Skill Development and Entrepreneurship - was initially set up under the Ministry of Finance to provide viability gap funding and promote private skill initiatives.

NODAL BODIES FOR SKILL DEVELOPMENT IN INDIA

Nodal bodies for skill development in India is categorised into Key bodies, Enablers, Implementing bodies and beneficiaries. The chart below helps in better understanding of nodal bodies for skill development in India.

NODAL BODIES FOR SKILL DEVELOPMENT IN INDIA

Key Bodies	Enablers	Implementing Bodies	Beneficiaries
<ul style="list-style-type: none"> Ministry of Skill Development & Entrepreneurship MHRD Ministry of Rural Development (MoRD) Other Central Ministries 	<ul style="list-style-type: none"> State Skill Development Mission (SSDM) NSDC NSDA SSCs NCVT SCVT Labour Laws Minimum Wages Act Financial Institutions Apprenticeships Act 	<ul style="list-style-type: none"> ITIs Training Providers Captive Training by Employers Schools Universities Assessment Companies 	<ul style="list-style-type: none"> Marginalized societies Unemployed youth Low income Group School & College Students

Source: Skill Development in India.

KEY BODIES

• Ministry of Skill Development and Entrepreneurship

The creation of the first-ever separate Ministry of Skill Development and Entrepreneurship was announced by Prime Minister Narendra Modi in June 2014. It is conceived to encompass all other ministries to work in a unified way, set common standards, as well as coordinate and streamline the functioning of different organisations working for skill development.

The Ministry of Skill Development and Entrepreneurship is entrusted to make broad policies for all other ministries' skill development initiatives and National Skill Development Corporation (NSDC). Mapping and certifying skills, market research and designing curriculum, encouraging education in entrepreneurship, make policies for boosting soft skills and computer education to bridge the demand and supply gaps are among the other goals.

• The Ministry of Human Resource and Development (MHRD)

The Ministry of Human Resource and Development (MHRD) governs the polytechnic institutions offering diploma level courses under various disciplines such as engineering and technology, pharmacy, architecture, applied arts and crafts and hotel management. MHRD is also involved in the scheme of Apprenticeship Training. Apart from this, MHRD has also introduced vocational education from class IX onwards, and provides financial assistance for engaging with industry/SSCs for assessment, certification and training.

• Central Ministries

There are 21 Ministries under the central government who are also working for the purpose of skill development. There are two approaches that these Ministries have: one approach is setting up training centres of their own for specific sectors like (adopted by Ministry of Labour & Employment, Ministry of Agriculture, Ministry of Health & Family Welfare, etc.). The second approach is in the form of Public Private Partnership (as adopted by Ministry of Rural Development, Ministry of Women and Child Development, etc.).

ENABLING AGENCIES

• The National Skill Development Corporation India (NSDC)

The National Skill Development Corporation India (NSDC) is a public private partnership organisation (now under the Ministry of Skill Development and Entrepreneurship) that was incorporated in 2009 under the National Skill Policy. Its main aim is to provide viability gap funding to private sector in order to scale up training capacity. The NSDC has tied up with more than 187 training providers, many of whom have started scaling up their operations. The NSDC's mandate also involves capacity building by working with different stakeholders and identifying best practices to create an excellence model. The NSDC has also been working to create awareness about the skill ecosystem and has rolled out electronic and print campaigns.

• Sector Skill Councils (SSCs).

The National Skill Development Policy of 2009 mandated the NSDC to setup SSCs to bring together key stakeholders i.e. industry, work force and academia. 29 SSCs are operational and 4 more SSCs have been approved by NSDC. They are funded by NSDC for the initial few years and are expected to become financially self-sustaining as they grow. These SSCs are expected to lay down the National Occupational Standards for different levels of jobs in their respective sectors, formulate certification and accreditation norms, strive to create knowledge repository on current requirement of skill development in the industry, assess the supply of skilled workers, identify the demand and supply gap in each sector, and identify trends and future requirements. With availability of trainers being a major challenge in scaling up the capacity, SSCs are also expected to play a crucial role in getting right industry support to facilitate training of trainers for their respective sectors.

• NCVT, SCVT and Quality Council of India

Established under Ministry of Labour and Employment with a view to ensure and maintain uniformity in the standards of training all over the country, the National Council for Vocational Training (NCVT) was set up in 1956. This certifying body conducts All India Trade Tests for those who complete training in ITIs and awards National Trade Certificates to successful candidates. The Council has representation from central and state government departments, employers' and workers' organisations, professional and learned bodies, All India Council for Technical Education, scheduled castes and scheduled tribes, All India Women's Organisation, among others. The State Council for Vocational Training (SCVT) at the state levels and the sub committees have been established to assist the National Council. The Quality Council of India (QCI) was set up jointly by Government of India and the Indian industry as an autonomous body to establish a national accreditation structure in the field of education, healthcare, environment protection, governance, social sectors, infrastructure, vocational training and other areas that have significant bearing in improving the quality of life. All institutions (Government and private ITIs) seeking formal affiliation from NCVT have to first get accreditation from the Quality Council of India.

IMPLEMENTING AGENCIES

Industrial Training Institutes

The DGET which governs Industrial Training Institutions (ITIs) has recently been aligned with Ministry of Skill Development and Entrepreneurship. There are more than 10,000 ITIs with a capacity of approximately 1.5 million seats. The DGET also governs RVTIs (Regional Vocational Training Institutions) and ATIs (Advance Training Institutions) focusing on specialized and high-end skill sets and trainers courses.

1.4.5. BEST PRACTICES OF SKILL DEVELOPMENT

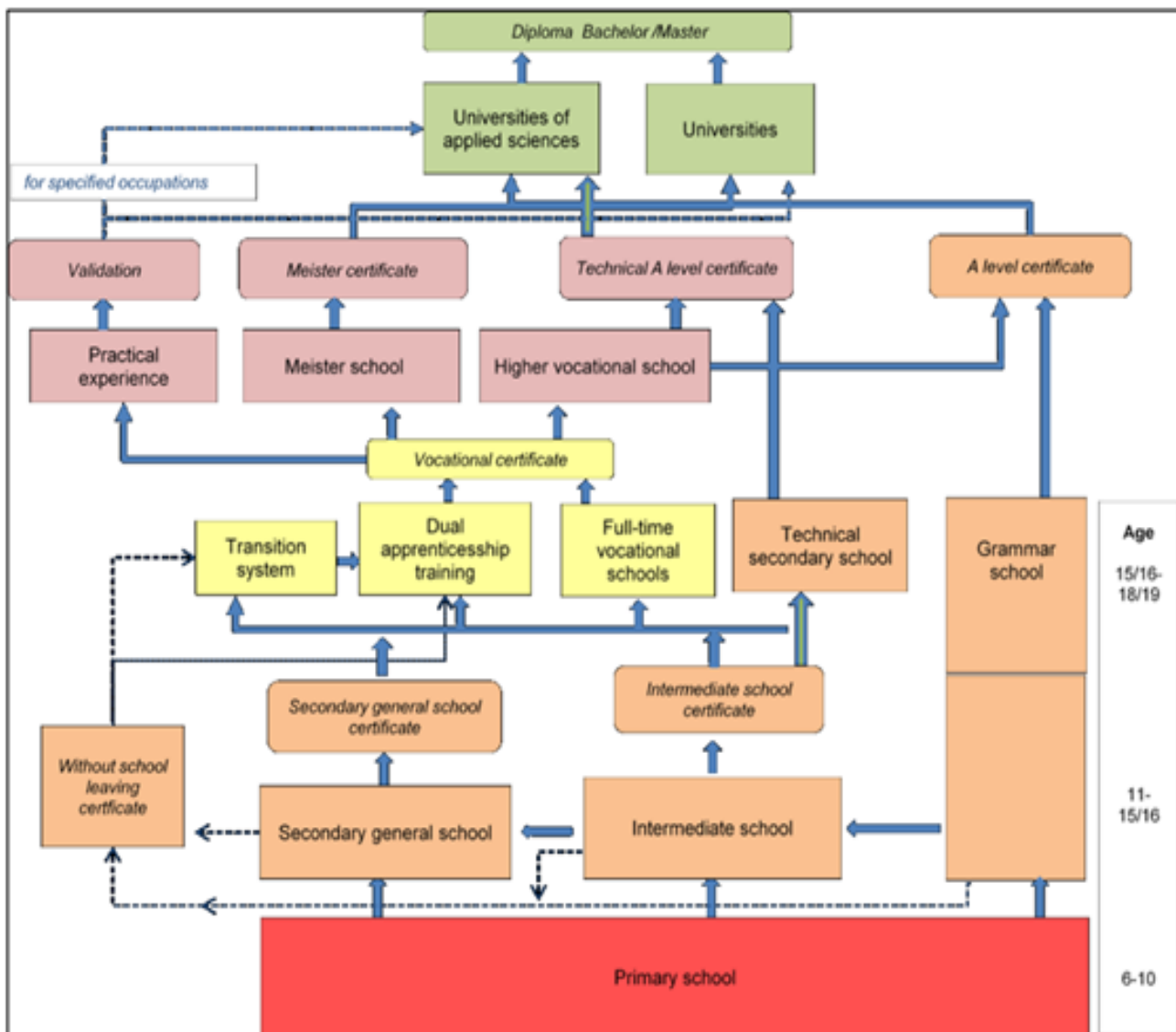
Researcher has reviewed best practices adopted in Germany, Australia and China, as they are known for efficient training systems and have been largely successful. The key objective is to have a better understanding of the training environment in these countries that have succeeded in developing an efficient skills system.

GERMANY

Germany largely follows a dual-system of Vocational Education and Training (VET). The system is called "dual" because training, under this system, is conducted in two places of learning: in the enterprise and in the vocational school. The company provides practical training, and vocational school supplements this on-the-job-learning with theoretical instruction and basic economic background.

Germany's education and VET structure requires compulsory education upto primary school and lower secondary school (typically around age of 15 or 16 years), after which there is an option of entering into vocational education & training or formal education. Under vocational training, students have a choice between dual apprenticeship training and training in full-time vocational schools. Most young people in Germany begin their initial vocational education and training by enrolling for apprenticeship.

GERMANY DUAL-SYSTEM OF VOCATIONAL EDUCATION AND TRAINING (VET) MODEL



Source: Skill Development in India.

The Dual VET Model

Dual VET programmes are currently offered in 349 trades and can take between two and three-and-a-half years. Germany's dual system of vocational education and training (VET) is a very simple and cost-efficient model.

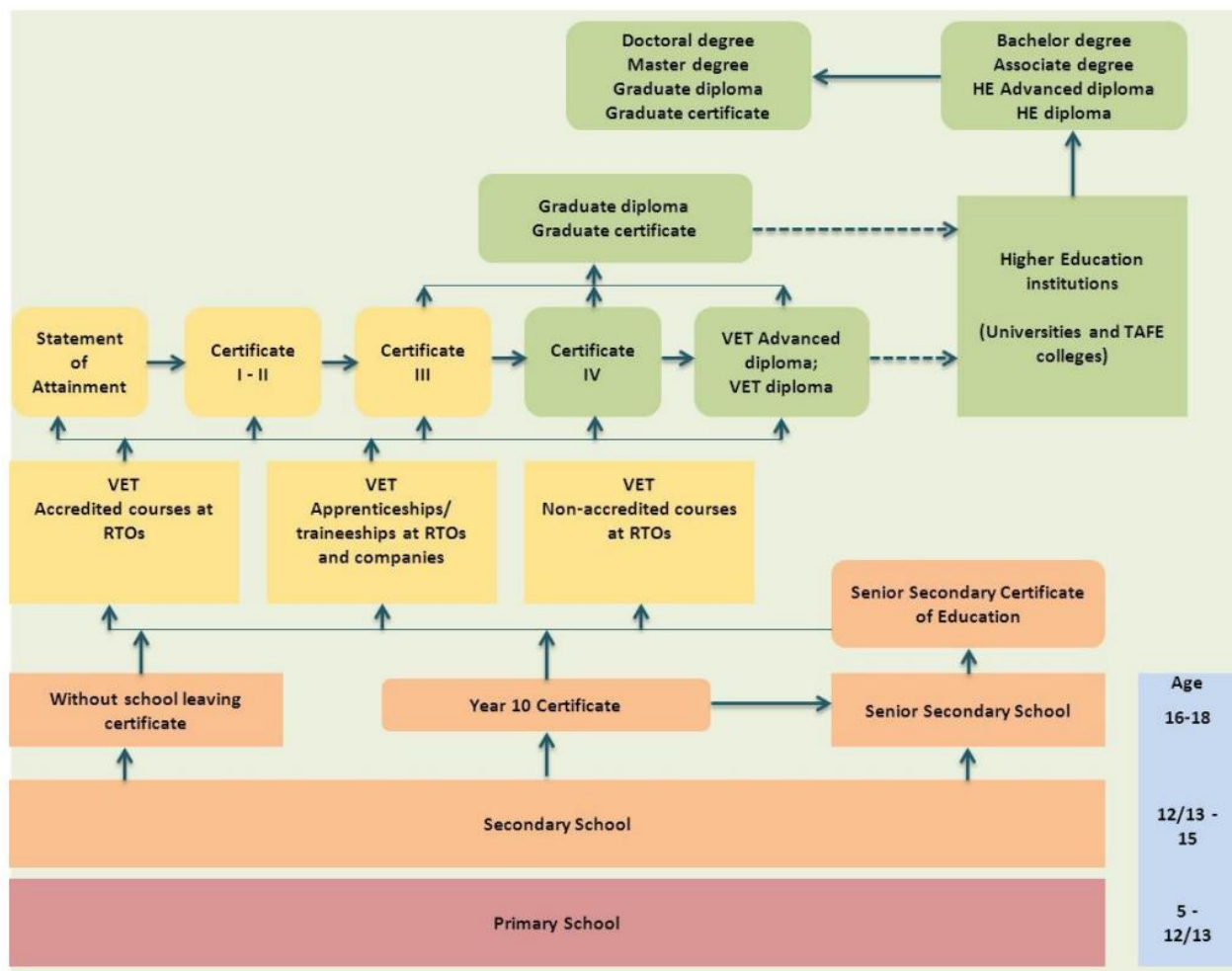
- The practical training (approx. 70 percent of training duration) takes place in companies. This training is based on a compulsory curriculum, which is adapted to the conditions of the training company and is monitored and controlled by the respective chambers, who also arrange for the interim and final examinations (comparable to Sectoral Skill Councils). This in-house training is guided and imparted by certified corporate trainers. The 'apprentices' undergoing training sign a vocational training contract with the company and are paid a training salary by them.
- The theoretical part of the training (approx. 20 percent of training duration) is taught in vocational schools, run by the State governments.

AUSTRALIA

Australia's Vocational Education and Training is an integral part of the overall education system in the country designed to deliver workplace specific skills. The system has been very successful, reflected in high participation rate of adults in vocational training.

Australia's VET system is characterised by competency based training, which is concerned with capability based outcomes rather than duration of course/training. Additionally, the system allows a person to gain formal qualifications regardless of how or where the training was delivered.

AUSTRALIA'S VOCATIONAL EDUCATION AND TRAINING



Source: Skill Development in India.

The general education and training system starts with primary education which is delivered in primary schools, followed by secondary education which comprises secondary schools and senior secondary schools. The last two years of secondary education (senior secondary school) are usually not compulsory. Young people can achieve a Year 10 Certificate or continue at Senior Secondary School to achieve a Senior Secondary Certificate of Education after Year 12.

Year 10 certificate holders can either opt for vocational training or enter a senior secondary school to pursue further education. Students who obtain a senior secondary certificate can choose to enter vocational training or enter higher/tertiary education, which is provided by Universities and Technical and Further Education (TAFE) Colleges.

VET structure

VET is a sophisticated system governed by interconnected government and independent bodies functioning within a National Skills Framework of Qualifications defined by Industry Training Packages and the Australian Quality Training Framework (AQTF).

VET is delivered by registered training organisations (RTOs). Training providers who want to provide accredited courses have to apply to become an RTO and can be either government or private providers. Government registered training organisations include Technical and Further Education (TAFE) institutions, secondary schools and colleges, universities, agricultural and technical colleges and community organisation providers.

Apprenticeship under VET

In Australia, apprenticeships and traineeships are available to everyone as no formal entry qualification is required. Apprenticeships are available at different certificate levels and for more than 500 occupations in most sectors of business and industry.

Apprenticeships can be delivered through following alternative ways:

- Australian school-based apprenticeships, which allow students from year 10 to combine completing school and starting an Australian apprenticeship.
- Full-time Australian apprenticeships wherein apprentice spends the whole week with on-the-job training (about 80 percent of time) in the company and off-the job training with a chosen training provider.
- Part-time Australian apprenticeships which are often used by small and medium sized enterprises. A minimum number of hours of on-the-job and off-the-job training per week are provided to the apprentice (e.g. 15 hours per week).

Under the apprenticeship system, a legal contract between an employer and an apprentice is necessary, which determines the training wage and conditions. Apprenticeship wages differ according to the level of qualification, training year, industry and the type of apprenticeship (school-based, part-time or full-time). In addition, the employer has to determine a training plan with details about on-the-job and off-the-job training, which has to be endorsed by the chosen training provider.

CHINA

The Chinese Technical Vocational Education and Training (TVET) is a comprehensive system which is systematically planned to meet the needs of vocational education and training at different levels. To meet the challenges of China's industrialization drive, the government has repeatedly taken initiatives to reform China's TVET system. The Vocational Education Law of 1996 provides the legal framework for the implementation/functioning of the vocational education and training system in the country.

Through its vocational education law, China ensured cooperation between vocational institutes/schools and society, enterprises and villages, and became market-oriented through methods such as learning and practice, learning while working, emphasizing on practical and vocational competence skills.

China's skill development model has been highly successful and developed at a rapid pace. In China, 59 per cent of those entering the workforce are skilled, of which 39 per cent are vocationally trained. China's skill development model has enabled transforming many of its high schools into skill-training centers, and successfully promoted internships for the vocationally-trained. Around one third of young people in China today enter vocational upper secondary schools.

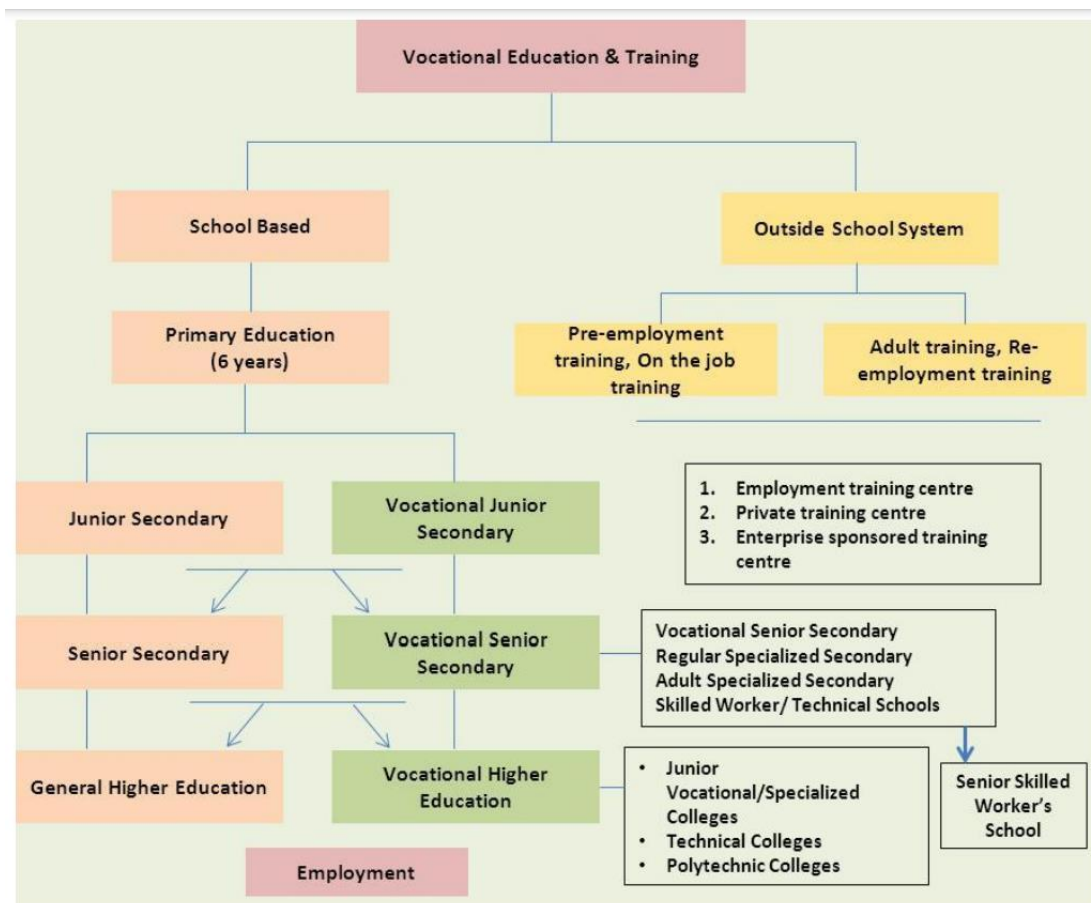
Structure

The system of vocational education consists of

- (a) Education in vocational schools and
- (b) Vocational training.

The formal school based vocational education is under the Ministry of Education (MOE) and has a slight emphasis on theory based training; while vocational training is under Ministry of Human Resources and Social Security (MOHRSS) and focuses on post-school, pre-employment, and on-the-job practical training, as well as training and re-training for those out-of-school or out of work. The education law of China mandates nine years of compulsory education including three years of vocational training. Vocational education and training in the school system is provided at three levels: junior secondary, senior secondary and tertiary while VET outside the schooling system is provided through adult learning and enterprise training.

CHINESE TECHNICAL VOCATIONAL EDUCATION AND TRAINING (TVET)



Source: Skill Development in India.

- The first six years consists of primary education.
- After primary education, students enter the junior secondary level (or junior middle school) wherein vocational education is introduced. This is for 3 years.
- Thereafter students can proceed with either general academic or vocational education schools, determined by the scores received by them in Senior High School Entrance Examination called Zhongkao. Typically, middle school graduates with lower marks end up in the senior secondary vocational stream and those with higher scores enter the general academic stream.
- In the vocational track, students apply for different vocational schools and programmes in their province, and are selected according to their results. They can also apply to enter good vocational schools in other provinces. Once senior secondary vocational education is completed, most graduates join the workforce while some progress to higher vocational colleges.

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EFFECTIVENESS OF E-WALLET IN ONLINE TRANSACTIONS

V. Vidyashree¹ and Dr. G S Vijaya²¹Assistant Professor, Department of Management Studies, KS School of Engineering and Management, Bengaluru²Professor, Decision Science Department, CMS Business School, Jain (Deemed-to-be University)**ABSTRACT**

In the present scenario, Digital wallets or E-wallets are becoming very popular and are acting as a substitute for physical payment of money during transactions. Due to the fast-paced lifestyle and rapid adoption of digital technology, mobile based transactions are gaining immense popularity. E-wallets are the latest addition to the user-friendly mobile applications. They are fast, secure and user friendly due to which their adoption is likely to bring major changes in the field of monetary transactions. E-wallets have evolved from banking systems where physical transaction was replaced by net banking which is now being overtaken by E-wallets.

The main focus of this study is to understand the effectiveness of E-wallets in the field of online transactions. This paper is formulated based on primary data and secondary data. Questionnaires were distributed to 200 respondents and their opinion is analyzed. Secondary data is collected using published articles, books, journals and websites. The research methodology used in this study is both exploratory and descriptive in nature. This study will give an insight in understanding the applications of E-wallets and their effectiveness in various fields.

Keywords: E-wallet, Mobile Applications, Security, Monetary Transactions, Digital Technology

INTRODUCTION

In the present trend mobile phones have replaced physical face to face interaction. Likewise, the online transactions are slowly replacing physical paper transactions. They are in the form of net banking, credit and debit card payment and e wallets.

E-wallets are virtual or cashless wallets that are made for a single account holder. It works the same way as an actual wallet but without actual cash. Once a digital transfer of funds is made in e wallet, one can make use of it to buy numerable items ranging from goods to services. It can be used to make bookings for various avenues.

Some of the most noted e wallets of India are Paytm, PayPal and mobikwik. All customers who register with such wallets have many benefits like reduction in fees and setup cost. The ability to make payments becomes easier, safer, cost efficient and faster. For using an e wallet, one must have a bank account linked and then transfer funds to the wallet. Then the transactions can be done. The e wallet will have a password and it is made up of two components software and data. The main difference between a bank account and e wallet is that the bank account charges fee for transaction but the e wallet does not and it is much more secure to it. There is also no hassle to remember the account number, pin and details related every single time.

LITERATURE REVIEW

In today's world, smartphone has become important part of everyday life. As it has become more affordable, the number of smartphone users has increased dramatically. Mobile wallet is developed by a concept called Digital wallet. Sam Pitroda, was the founder of Digital Wallet, who had filed the patent in US (Pitroda S., Desai M., 2010).

According to Ambrish et.al; (2015), there are some application of virtual wallets of which some are Paytm, free charge and mobikwik. All these applications provide commodities like bill payments, DTH recharge etc. and work on credit system. Various e-wallet application areas are money transfer, ticket booking for train, airplanes, bus, bill payment, bank account management.

The user has to give his credit card and get linked to the app. Thousands of people have found this app to very useful and efficient. According to Pawan Kalyani, 2016 the basic Procedure to use e-wallet is to login to the website, provide all the necessary details and transfer the money to e-wallet by physically going into the outlet company (e wallet provider) or by online money transfer. The basic types of e-wallets are company specific (closed) like taxi services, supermarket chains etc. and Bank E-Wallets which can be used in any other shops or competing business.

According to the study conducted by Manikandan et. al., 2017, Reserve bank of India has made available different types of wallets which are as follows:

1. Open wallet: enable users to buy goods and services, withdraw and transfer the funds. Example is M-Pesa .

2. Semi-open wallet: enables to do transactions with merchants and have contract with their companies. Example is Airtel money.
3. Closed wallet : popular in e-commerce where the money is locked with merchants in case of cancellation/return of the order/gift cards.
4. Semi closed wallets: allows to buy goods and services at listed merchants/listed location and does not permit cash withdrawal.

Advantages of e-wallet are that currency is preloaded and it helps in instant purchases of all the requirements. Also, it gives security, safety and easier to handle, ease of use and ease of access. The e-wallet amount can vary and it is offered by various players in the market like Google, Oxigen, PayTM , Banks like ICICI, AXIS, SBI etc., Telecom sectors like Airtel and startups to cater to the needs of the customers. E-wallets can be used for multiple payments.

The biggest disadvantage of e wallets is that it is not accepted in many merchandising stores as of now in India. Fear of misuse of money by hackers and frauds, fast internet connection, risk of malfunction or shutting down the information is possible as the e-wallet information is stored in cloud. The biggest fear in the minds of the people is that the customer information will get leaked so it should be secured and encrypted by the company (Heba soffar, 2017).

RESEARCH METHODOLOGY

The research methodology used in this study is both exploratory and descriptive in nature. The type of research undertaken in this paper is quantitative as well as qualitative. The sampling techniques used are random sampling and convenience sampling. The tool used in this study is a closed ended questionnaire containing various questions pertaining to the subject e wallets and their perceived awareness. The questionnaires were distributed in both paper and electronic form to 200 respondents. The respondents are belonging to various places in and around Mysuru. The comparison is carried out by assembling the data in the form of a table and graphically representing them through pie charts and bar graphs. Percentage method is used to analyze the data. The collection of data took a week's time. The limitations of the study are time and the involvement of only people belonging to places in and around Mysuru, Karnataka state. The secondary data were gathered through journals, articles, internet and other published materials.

OBJECTIVES OF THE STUDY

1. To study the awareness of the end users pertaining to e wallets.
2. To understand the perceived effectiveness of e wallets.

FINDINGS

1. 63 % of the respondents belong to the age group 18-25 years, 23% belong to 25-40 years, 11% belong to 40-60 years and 3% belong to the age group 60 years.
2. 52% of the respondents are female and 48% are male.
3. 57% of the respondents have master degree, 29% have degree, 18% have high school qualification and 5% have doctoral degree.
4. 64% of the respondents belong to Mysuru, 17% belong to Bengaluru, and 19% belong to the other parts of Karnataka.
5. 94.5% of the respondents use mobile applications with payment options and 5.5% do not.
6. 67.5% of the respondents are aware of Paytm, 21% are aware of PayPal, 28% are aware of Mobikwik and the rest are having awareness of different e wallets.
7. The usage frequency among the respondents are 39.5 % for once a month, 18% for once a fortnight, 18% for 2 to 3 times a week, 15.5% for once a week and 9% for daily usage.
8. 2%, of the respondents strongly disagree and 32.5% of respondents strongly agree that digital wallets are cost effective.
9. 1% of the respondents strongly disagree and 35.5 % of respondents strongly agree that digital wallet is convenient to buy products online.
10. 4% of the respondents strongly disagree and 21.5 % of respondents strongly agree that digital wallet increases brand loyalty.

11. 1.5%, of respondents strongly disagree and 27% of the respondents strongly agree that digital wallet ensures secure transactions.
12. 5%, of the respondents strongly disagree and 28% strongly agree that digital wallet retains privacy.
13. 3%, of the respondents strongly disagree and 33.5% of the respondents strongly agree that digital wallet increases ease of use and access.
14. 2% of respondents strongly disagree and 28% of the respondents strongly agree that digital wallet makes it easy to get refund/reimbursement.
15. 2% of respondents strongly disagree and 29% strongly agree that digital wallet gives competitive advantage to businesses.
16. 3.5% of respondents strongly disagree and 44% of the respondents strongly agree that digital wallet is time efficient.
17. 63% of the respondents feel that Payment may not be safe and secure, 38% feel Provider companies can record their personal details and use them somewhere else, 33% feel on cancellation there may be no refund, 25% feel provider companies may ask for too much personal information and 43% feel Internet/Mobile Data Connection is compulsory while 0.5% feel that third party service charge may not be updated regularly. These are the disadvantages.
18. 34% of the respondents feel that always service is available for making payments , 43.5% feel that they can get shopping offers and discounts, 29% feel that there will be Hassle free mode of payment , 23% feel Safe and secure mode of payment and 55% feel Anywhere and anytime access is possible. These are the advantages.

ANALYSIS AND INTERPRETATION

Do you use mobile application with payment options?

200 responses

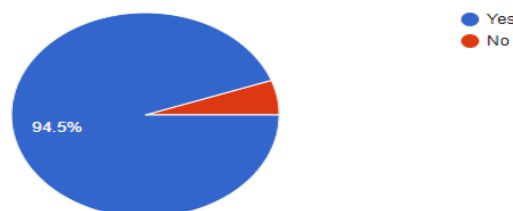


Figure 1: Usage of mobile applications with payment options

As seen from figure 1 the usage of e wallets is quite widespread and it has been accepted. There is a very small percentage of respondents who do not use the e wallets. As seen from figure 2 the awareness level is more as the respondents knew about the other e wallets like tez, airtel money, Ola money and many more.

count vs. e wallet

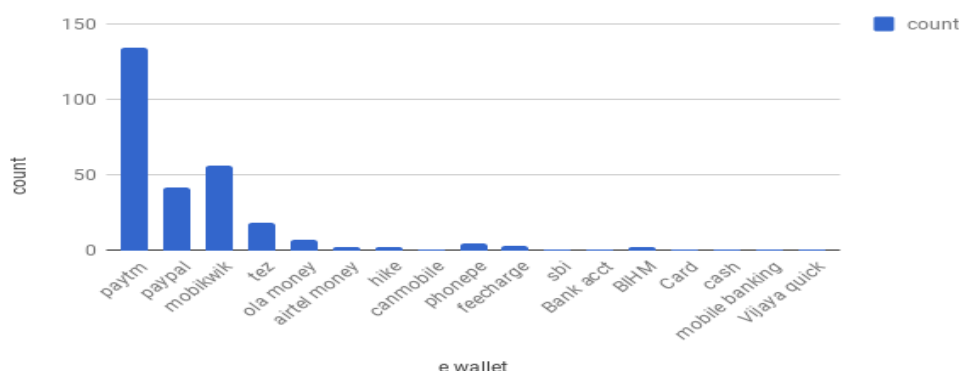


Figure 2: Different e wallets

From the frequency of usage it can be inferred that the frequency of usage is slowly increasing and showing a positive trend. There are respondents whose frequency of usage is daily as they might use for transportation which may be apps like ola, uber, jugnoo etc. the frequency also depicts a very important point that e wallets are effectively capturing the markets and slowly replacing older systems of payment as seen from figure 3

How often do you use digital wallet?

200 responses

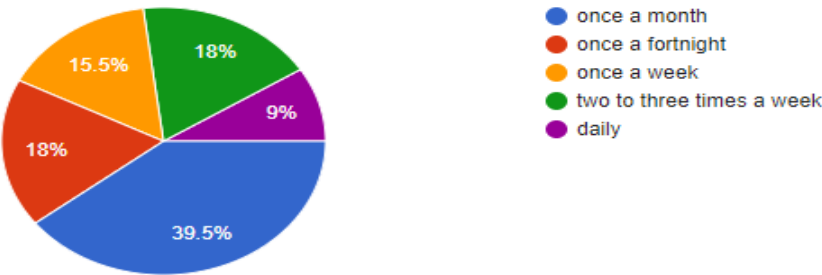


Figure 3: Usage frequency

The e-wallet user’s perception of cost effectiveness is as shown in Figure 4. The respondents agreed that it was very economical. The reason for the same might be that the digital wallet do not charge extra for transactions like the other methods in the name of transaction fees.

digital wallet is cost effective

200 responses

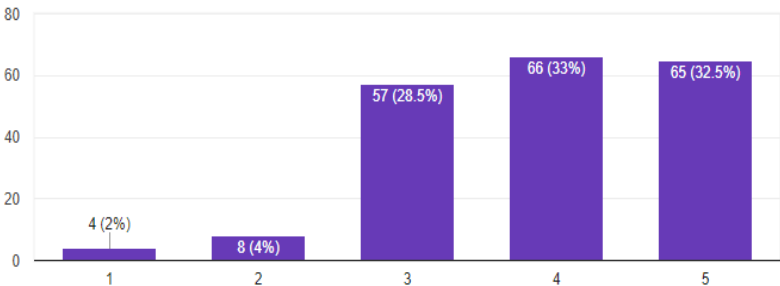


Figure 4 : Cost effective

The e wallet does not have any difficult procedures involved in its usage. It has some very simple steps to be followed to setup e wallet and after the setup they can be used as per one’s will and wish without having to do any steps. It will be just “choose and click pay” thus it can be inferred that it is very convenient to buy products using e wallets which is also the opinion reflected from the results plotted in the figure 5.

digital wallet is convenient to buy products online

200 responses

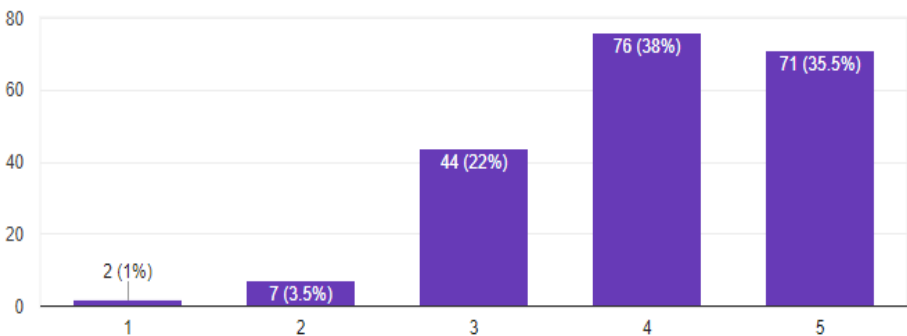


Figure 5 : Buying convinience

Most of the respondents choose to be neutral about e wallets increasing brand loyalty as seen from figure 6. The reason might be that e wallets are just a payment medium which makes paymeny process easier but does not contribute to brand publicity. Thus brands do not have any special advantage with usage of e wallets.



Figure 6 : Brand loyalty

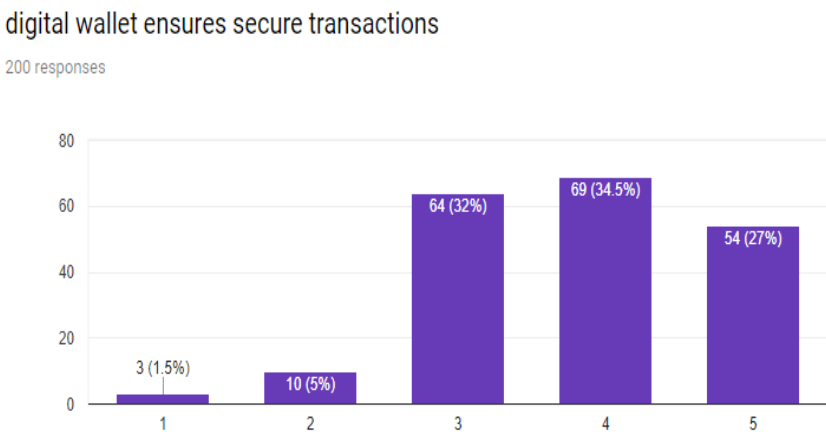


Figure 7 : Secure transaction

Figure 7 represents one of the main reasons to use e wallets . It contributes to security in transactions. As represented by the figure 7 and figure 8 the maximum respondents have concentrated on the opinion of neutral and agree as there is security in transacton but it comes with a little risk as not all e wallets offer the same level of security and trust to its users.One of the main reasons for this opinion might be because the users have security in transaction but they have revealed some very important details to the ewallet for registering in it like the bank account details and personal information. This information is taken by e wallet companies for verification of the user and is very confidential. Thus it can inferred that it is a double edged sword to use e wallets.

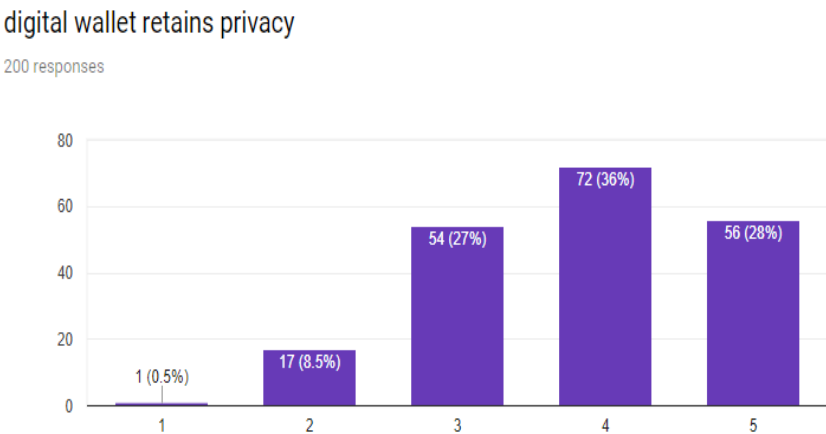


Figure 8 : Privacy

Digital wallet increases ease of use and access

200 responses

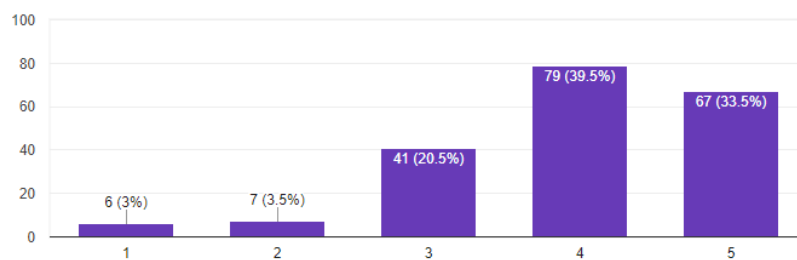


Figure 9 : Ease of use and access

As mentioned above and seen from figure 9 , digital wallet is not only easy to use but also for accessing. It might be because of the fact that today's generation can't live without their smartphones and the digital wallet is residing on the phone . Thus it can be inferred that digital wallet can be used anytime ,anywhere and for any kind of transaction which makes it one of the most important digital inventions in recent times.

Digital wallet makes it easy to get refund/reibursement

200 responses

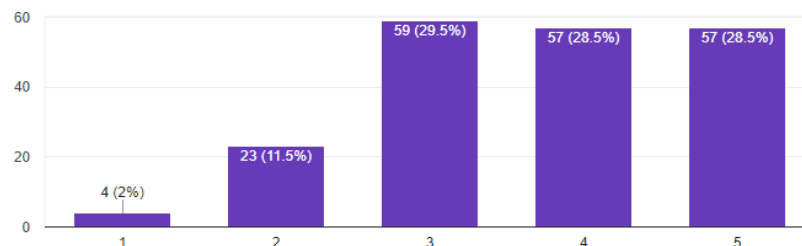


Figure 10 : Refund/Reibursement

As seen from above figure it is easy to get refund and reimbursement in e-wallet transaction. It may be because the e wallet records all the process and gives online information may be to mobile or through email. Thus every step is noted. When a problem would occur in a product or service availed it will be easy for the refund.

Digital wallet gives competitive advantage to businesses

200 responses

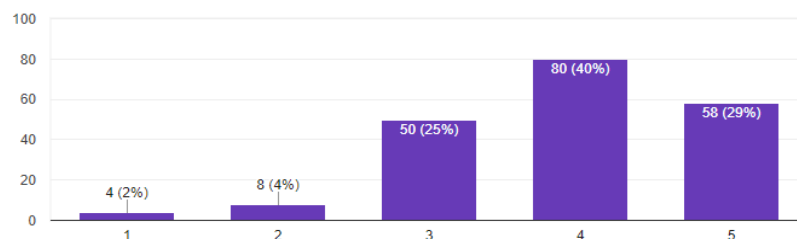


Figure 11 : Competitive advantage

Digital wallet is time efficient

200 responses

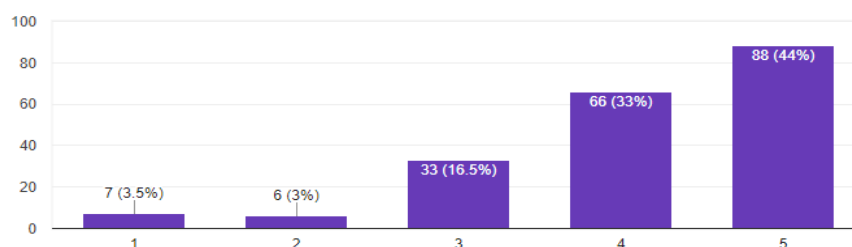


Figure 12 : Time efficiency

As seen from the above figures it can be noted that most of the respondents will have a competitive advantage by using e wallets. As discussed, e wallets do not contribute to brand advertisement but when using e wallet the advantages of the same are taken into consideration. Thus it can be inferred that e wallets contribute to a company's competitive advantage. It is seen that almost all the respondents agree to the fact that e wallets are time efficient by conveying the opinion of agree and strongly agree to almost 80%.

The main advantages and disadvantages of e wallets (%) are as shown in figure 13 and figure14.

What are the advantages while using Digital Wallet?

200 responses

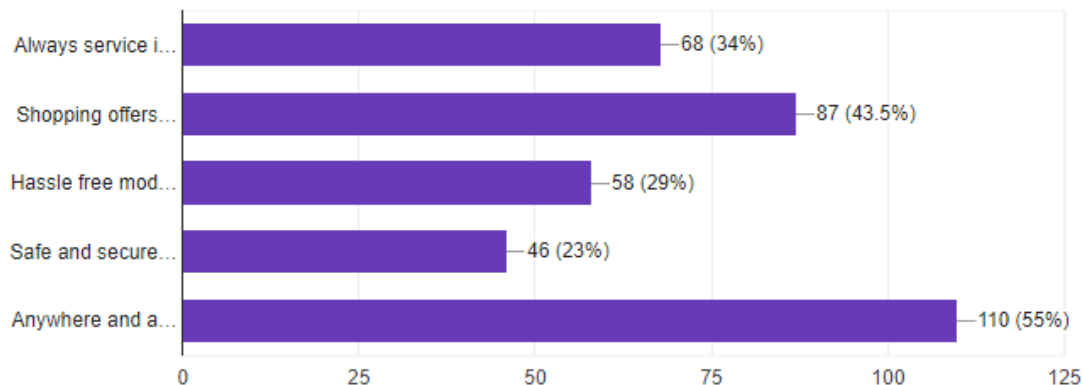


Figure 13: Advantages

what are the disadvantages while using digital wallet

200 responses

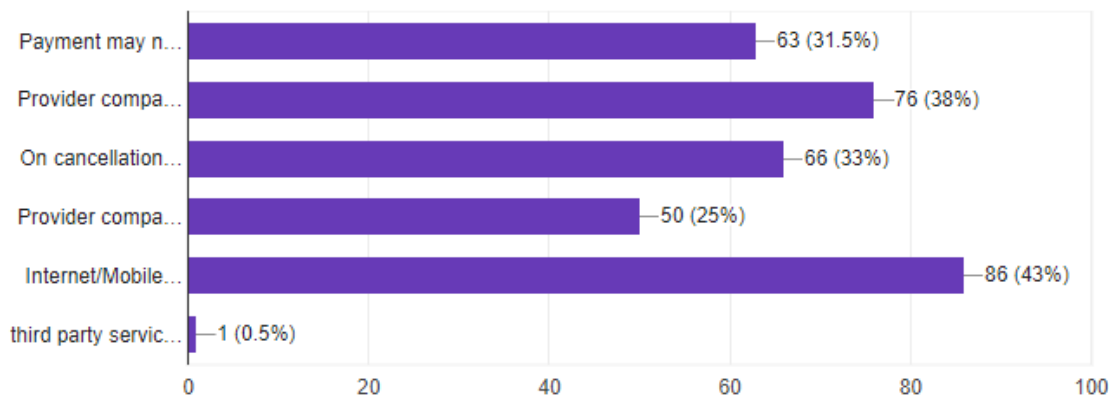


Figure 14: Disadvantages

CONCLUSION

Awareness about E-wallets is increasing among the people because of the digital revolution which has occurred in the present Indian scenario. There are many kinds of e-wallets which are effectively used by the people. Digital wallets can be effectively used anytime, anywhere and for any kind of transaction with ease.

In this paper, an attempt was made to understand the awareness of the end users pertaining to e wallets and perceived effectiveness of e wallets. Advantages and disadvantages e-wallet usage are identified and the frequency of usage is identified. The commonly used mobile applications with payment options are Paytm, mobikwik and others. Education is an important factor in deciding the digital e-wallet usage. There is an increased growth in the smartphone effective usage and acceptance of digital payment in Karnataka state. It can be concluded that people are well aware of e wallet and their pros and cons and base their judgement on logical facts. Thus the perceived effectiveness of e wallets are positive.

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18. <https://www.epam.com/insights/infographics/next-gen-payment>

A STUDY ON STRATEGIES OF UNORGANISED RETAILERS TO FACE COMPETITION FROM ORGANISED RETAILERS

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ABSTRACT

The study is about strategies used by unorganised retailers to face to competition from organised retailers. Due to the sharp rise and changing consumption pattern of Indian consumers, share of organised segment is growing rapidly. While traditional formats or unorganised retail formats continue to dominate the retail market. The study was conducted in Palghar district on 51 organised retail stores which includes segments like grocery, jewellery stores, fashion cloths etc. Researcher has used Likert scale technique to collect the responses from unorganised store retailers and used Anova for the purpose of data analysis and hypothesis testing.

Keywords:- Strategies, Unorganised Retailers.

INTRODUCTION

Unorganised Retailing refers to the traditional formats of low- cost retailing, which operates with small amount of capital and considered as major source of employment. Few years back, unorganised retail in India, was considered as most favourable destination for the consumers. It was one of the major source for self employment, for unemployed youth, having low capital to invest. Traditional retailers also had benefit of acquaintance with localities and local vicinity. The credit sale & free home delivery were the major strength for their growth and survival. Small retailers, who had understanding for the wants of individual customers, created and serviced niche markets. (Gupta, Himanshu 2013) Indian retail industry has emerged as one of the most dynamic and fast-paced industries due to the entry of several new players. It accounts for over 10% of the country's gross domestic product (GDP) and around eight% of the employment. India is the world's fifth-largest global destination in the retail space. and The sector is experiencing exponential growth, with retail development taking place not just in major cities and metros, but also in tier II and tier III cities. The organised Indian retail industry has begun experiencing an increased level of activity in the private label space. (IBEF, 2022).

One of the principal reasons behind the explosion of retail and its fragmented nature in the country is the fact that retailing is probably the primary form of disguised employment in the country. Given the prevalent under-employment, it is almost a natural decision for an individual to set up a small shop or store, depending on his or her means and the available capital. And thus, a retailer is born, seemingly out of circumstance rather than choice. This phenomenon quite aptly explains the millions of kirana shops and small stores. Another reason is the fact that Indian community is traditionally divided into the intellectuals, the ruling class, the business class and the service class people. The natural choice for business class people (at least till the modern economy picked up) was either farming or some form of retail business. (APOORWA MISHRA, 2017)

REVIW OF LIETRATURE

(Das, 2015) This article seeks to understand the competitive strategies followed by unorganized retailers in present competitive and fast changing environment. The study is descriptive cum analytical in nature. The modern young people are mostly going to get purchase from Malls and shopping complex. So, there is stiff competition between organized and unorganized retailers. The study found that reducing price, to make available more choices and branded product are the major tool for unorganized retailers to face competition. The study also helpful in understanding is there any difference in the strategy followed by the unorganized retailing in two cities.

(Dr Krishna Mohan Abhimalla, 2017) This study is aimed at understanding the pricing strategy and how pricing is done for Fruits & Vegetables at organised retailers of F&V. It is also aimed at knowing the customer perception of the value offered by organised retailers of F&V. With help of primary data researcher has analyzed to find out as many associations as possible between the various variables of sales promotion and demographic attributes.

(Dilshath, Kapoor, 2018) The US\$ 500 billion Indian retail markets, growing at an annual rate of about 20 percent, is largely dominated by small shops and 'kirana' stores as of now. The organized retail segment is in its nascent stage and has a huge potential to harness in the sub-continent. Foreign giants like Wal-Mart and Ingvar

Kamprad, Elmtaryd, and Agunnaryd [IKEA] have recently received the Government's nod to enter into the Indian market, after making all the necessary compliances.

(Saxena, 2011) From this study it was observed that most of the customers are working and they don't have much time to spend for shopping of grocery items, so they prefer it to be home delivered, and so the local grocery stores provide this service to retain their customers and to attract others. Some shoppers give approximately 3% discount on the total bill of the month. Sometimes the customers even buy chopped vegetable so that the time of cutting the vegetables can be saved. To retain their old customers and to lure new ones, the retail shop owners are using various strategies such as discounts, home delivery, credit facility, good quality products, good service, keeping variety of items, advertisement, keeping reasonable rates and establishing good rapport with the customers.

RESEARCH METHODOLOGY

Objectives

To know the different business strategies adopted by Local Retailers to face the competition from Organized Retailers.

Hypothesis

Null Hypothesis (H0):-The business policies which are used by Local Retailers are not helpful to face the competition with Organized Retailers.

Alternate Hypothesis (H1):- The business policies which are used by local retailers helpful to face the competition with Organized Retailers.

Sampling

To study the strategies used by unorganised retailers, Random sampling method was used total 52 samples were collected from different area of Palghar district in Maharashtra.

Limitation:-

- The Geographical limitation of Primary data is bound to the Palghar district only
- It will be limited to the sample size of individual in the selected category of Organized Retail stores like Grocery, Faishion and Apparels, Jewelry etc. .

DATA ANALYSIS AND INTERPRETATION

Frequency table of Gender

Gender	Respondents	%
Male	50	96
Female	2	4
Total	52	100

Frequency table of Age

Age	Respondents	%
Less than 25	0	0
26-40	25	48
41-55	26	50
More than 55	1	2
Total	52	100

Frequency table of Education

Education	Respondents	%
Not Educated	0	0
Undergraduate	32	62
Graduate	16	31
Postgraduate	4	7
Total	52	100

Frequency table of Income

Income	Respondents	%
Less than 2 L	0	0

2 – 5 L	2	4
5 – 8 L	38	73
More than 8 L	12	23
Total	52	100

Frequency table of Type of Business Segment

Type of Business Segment	Respondents	%
Food and Grocery	25	48
Fashion and Apparels	18	34
Jewellery store	3	6
Others	6	12
Total	52	100

Frequency table of No of Years of operation

Years of operation	Respondents	%
Less than 5 years	5	10
5 – 15 years	34	65
15 -25 years	13	25
More than 25 years	0	0
Total	52	100

HYPOTHESIS TESTING

Table of ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
1.	Products' pricing have been reduced in order to attract more buyers.					
	Between Groups	.017	2	.008	.216	.806
	Within Groups	1.906	49	.039		
	Total	1.923	51			
2.	Increase savings with the result of reduced workforce					
	Between Groups	1.724	2	.862	.589	.559
	Within Groups	71.719	49	1.464		
	Total	73.442	51			
3.	Increase the number of product lines available to customers in order to provide additional options.					
	Between Groups	.673	2	.337	1.649	.203
	Within Groups	10.000	49	.204		
	Total	10.673	51			
4.	Product lines which are underperformed have been discontinued.					
	Between Groups	3.017	2	1.508	1.057	.355
	Within Groups	69.906	49	1.427		
	Total	72.923	51			
5.	Newly introduced self service attracts large number of customers					
	Between Groups	.058	2	.029	.195	.824
	Within Groups	7.250	49	.148		
	Total	7.308	51			
6.	Better point of display attracts customers to buy more.					
	Between Groups	.014	2	.007	.073	.929
	Within Groups	4.812	49	.098		
	Total	4.827	51			
7.	Increased range of brands attracts more potential customers					
	Between Groups	.067	2	.034	.455	.637
	Within Groups	3.625	49	.074		
	Total	3.692	51			
8.	Improved home delivery service provide better opportunity to retain customers					
	Between Groups	.339	2	.169	1.076	.349

	Within Groups	7.719	49	.158		
	Total	8.058	51			
9.	Providing Longer credit period facilities					
	Between Groups	5.433	2	2.716	2.300	.111
	Within Groups	57.875	49	1.181		
	Total	63.308	51			
10.	Providing special discount and offers during special occasion and festivals					
	Between Groups	2.800	2	1.400	1.077	.349
	Within Groups	63.719	49	1.300		
	Total	66.519	51			
11.	Started Following Customised approach to connect with customers					
	Between Groups	2.401	2	1.201	1.289	.285
	Within Groups	45.656	49	.932		
	Total	48.058	51			
12.	Availability of different payment options					
	Between Groups	.014	2	.007	.126	.882
	Within Groups	2.813	49	.057		
	Total	2.827	51			
13.	I started using social media for staying connected with customers					
	Between Groups	2.827	2	1.413	1.823	.172
	Within Groups	38.000	49	.776		
	Total	40.827	51			

The above table of ANOVA presents the results of analysis that this section have thirteen variables of the strategies or policies will help the local retailers to face competition from organized retailers, all the thirteen variables are having greater significant values as compare to standard alpha level .05, therefore for each variable null hypothesis is accepted that is “The business policies which are used by Local Retailers are not helpful to face the competition with Organized Retailers” and thus reject alternate hypothesis that is “the business policies which are used by local retailers helpful to face the competition with Organized Retailers”. Therefore, it is concluded that the local retailers are not using sound business policies to face the competition.

CONCLUSION

In India, unorganised retailing is dominating the Retail Industry. Its share is 96 per cent, whereas organised retailing has only 4 per cent share. When compared with unorganised retailing, organised retailing is growing with alarming speed. With the growing popularity of organised retailing it is become difficult for unorganised retailers to face the competition to survive in market. From the data analysis it indicates that unorganised retailers of Palghar district are not using sound policies. They must have to upgrade themselves and understand the customer requirements. As many unorganised retailers are not following strategies like different payment options, Using social media and better point of display etc. All this goes negative for unorganised retailers.

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A STUDY TO KNOW THE LEVEL OF AWARENESS OF THE AB-PMJAY SCHEME AMONGST THE SELECTED BENEFICIARIES FROM URBAN AREA OF THANE DISTRICT, MAHARASHTRA

Ms. Pallavi Omkar Sawant and Dr. Ashok S. Luhar¹P.h.D. Research Scholar, D.T.S.S. College of Commerce, Malad, Mumbai, University of Mumbai²In-charge Principal, A. D. K. Degree College of Arts & Commerce, Borivali (West), Mumbai, University of Mumbai**ABSTRACT**

Ayushman Bharat (AB) is a flagship initiative of the National Health Authority (NHA) which comprises of two components and one of which is Pradhan Mantri Jan Arogya Yojna (PM-JAY). It was been established to achieve its goal of having 'Universal Health Coverage' across India. However, this goal seems to be far from being achieved. Unless the scheme outreaches itself to its target audience, hoping of having UHC across India is like living in a dream world. Thus, in the present study, the researcher is striving to know the level of awareness of the AB-PMJAY scheme amongst the selected beneficiaries from urban area of Thane district who have already used the scheme. The findings from the study would help to know how the beneficiaries who have used the scheme are aware of the scheme and what factors vary their level of awareness of the scheme.

Keywords: awareness, beneficiaries, age, gender, AB-PMJAY scheme

INTRODUCTION

AB-PMJAY is ideally the largest health insurance scheme in the world which aims in providing a cashless health cover of 5 lakhs per family, per year to over 10.74 crores of poor and vulnerable families which forms the bottom 40% of the Indian population.¹ AB-PMJAY is ideally the largest health insurance scheme in the world which aims in providing a cashless health cover of 5 lakhs per family, per year to over 10.74 crores of poor and vulnerable families which forms the bottom 40% of the Indian population. The households included under this health insurance are based on deprivation criteria for rural areas and occupational criteria for urban areas as covered in Socio-Economic Caste Census (SECC) 2011. For an urban area, in total, eleven occupational criteria define the eligibility of the beneficiaries to get benefits of this scheme (about/pmjay). The goal of this scheme is to achieve UHC across India. However, AB-PMJAY and schemes like it fail in reaching their target audience and thus, fail in their principle of providing affordable healthcare services to all. There are several factors responsible for this, of which the main is the low awareness of the scheme amidst its beneficiaries. Therefore, the researcher intends to study the awareness level of the beneficiaries with regards to the AB-PMJAY scheme but from those beneficiaries who could avail the benefits of the scheme. This is because the researcher wants to know that whether the beneficiaries after availing the scheme are fully aware of the scheme and its features or not. Such a disclosure would help in understanding that where awareness is needed first and what steps can be taken to improve the awareness amidst the beneficiaries availing the scheme so that they become the catalyst in propagating the awareness of the scheme in their respective circle.

RESEARCH QUESTION

This research has been undertaken to find out the answer to the following question:

- How the level of awareness of the AB-PMJAY scheme differs across gender of the beneficiaries?

OBJECTIVES OF THE STUDY

- To understand the level of awareness of the AB-PMJAY scheme across gender of the beneficiaries.

HYPOTHESIS OF THE STUDY

Null hypothesis: There is no significant difference between level of awareness of the AB-PMJAY scheme across the gender of the beneficiaries.

Alternate hypothesis: There exists a significant difference between level of awareness of the AB-PMJAY scheme across the gender of the beneficiaries.

REVIEW OF LITERATURE

PANDEY, N., JHA, S., & RAI, V. (2019) discusses five factors that would drive the beneficiaries to adopt health care facilities under AB PM-JAY. One of the factors as surveyed and discussed in this paper broadly talks about the efforts that the government should be taking to create awareness about the scheme. The authors strongly voice out that good communication skills should be adopted to promote the scheme and the information thereby shared and the interpretation of it shall be consistent so that the beneficiaries would feel better informed

about the scheme. The authors' point out that creating awareness along with robust infrastructure at the local level is both important for the successful implementation of the scheme.²

KANORE, L., & SATPUTE, S. (2019) have attempted to study the awareness level of AB PM-JAY amongst the middle and low-level income groups of the urban area. The study also aims to analyze the awareness of benefits offered by the scheme and what can be the possible hurdles in the implementation of the scheme. The data analysis of the paper fetched a result that merely 49% of the respondents were aware of the scheme although the difference in the respondents who were aware and weren't, was not statistically significant. Further, among that 49% of the aware respondents, none were aware of the benefits that the scheme is offering to the beneficiaries. The paper also broadly talks about the inclusion and exclusion of the families as beneficiaries and states that how here the poor implementation of the scheme can be seen as the benefits don't reach the needy.³

PANDEY S., & BISWAS, B.(2019) discussed in their paper, the current status of AB PM-JAY across India. The paper highlights that the total number of states and union territories that have joined this scheme are 32 and that states like Delhi, Odisha, Telengana have not joined. In fact, West Bengal withdrew itself from this scheme. The authors strongly opine that the more the number of States and Union territories gets involved in this scheme the more it can reach to its target audience.⁴

7) BORDE, A. K. & DR. BORGAVE, S.A. (2020) aimed to have an analytical study to comprehend the relationship between some demographic and political factors with AB PM-JAY. The study revealed that the number of hospitals and distribution of empanelled hospitals under this scheme is well related to the demographic factors such as rural and urban population and weakly related to the other demographic factors like per capita income, literacy rate, and population density.⁵

Thus, through the by reviewing the above pieces of literature, the researcher could analyse that there are different factors that influence the awareness of the scheme amidst its beneficiaries. Therefore, the researcher in the present study opt to find out the difference between the level of awakened of the scheme across gender of the beneficiaries.

RESEARCH DESIGN

Research design is a detailed analysis of how an investigation took place. A research design typically includes how the data is to be collected, what instruments will be employed and how the information will be organized. For the present study, the researchers have an analytical research. It is analytical as inferential analysis is carried to understand the level of awareness of the AB-PMJAY scheme across gender of the beneficiaries. The reference period of the data collected for the study ranges from April 2020 to April 2022 from the beneficiaries who availed the scheme for non-covid reasons. Total data of 100 such beneficiaries who have availed the scheme in the above period was taken to know their level of awareness with regards to the AB-PMJAY scheme through a self-constructed questionnaire prepared by the researcher. Out of these random 100 beneficiaries, 58 were male beneficiaries and remaining were female beneficiaries.

DATA ANALYSIS TOOLS AND TECHNIQUES

Normality of the data was tested applying 'Shapiro Wilk Test' and 'Mann-Whitney Test' was used to test the significance of the hypothesis.

INFERENTIAL ANALYSIS AND INTERPRETATION

Inferential Analysis is a form of analysis that is used to conclude associations between variables. This analysis is exclusively designed to test the hypothesis. The difference between the **level of awareness of the AB-PMJAY scheme** and **gender of the beneficiaries** was tested for normality based on the Shapiro-Wilk Test. ($\alpha=0.05$) and it was witnessed that the difference is normally distributed (p-value is 0.068).

Table 1
Test of Normality for 'Awareness level of the AB-PMJAY scheme' across 'Age'

Null Hypothesis	Test of Normality	Statistics	Significance Value	Result of Normality Test
The awareness level of the AB-PMJAY scheme in the male respondents is normally distributed.	Shapiro-Wilk	.815	.000	Reject Null Hypothesis

The awareness level of the AB-PMJAY scheme in the female respondents is normally distributed	Shapiro-Wilk	.899	.001	Reject Null Hypothesis
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- 1) The P value for awareness level of the AB-PMJAY scheme in the **male beneficiaries** was .000 as per Shapiro-Wilk Test. This value is less than critical p value .05. Hence, we reject the null hypothesis and state that data for level of awareness of the AB-PMJAY scheme in the **male respondents group** is not normally distributed.
- 2) As the P value for awareness level of the AB-PMJAY scheme in the **female respondents group** was .001 as per Shapiro-Wilk Test and was very much less than the critical p value .05, so, the null hypothesis framed in the above table for female respondents group gets rejected and state that data for awareness level of the AB-PMJAY scheme in the **female respondents group** is not normally distributed.

Thus, it could be sensed from the above table and interpretation that the null hypotheses got rejected for both male and female respondents group. This clearly states that the data for both these groups was not normally distributed and therefore, a non-parametric test '**Mann-Whitney Test**' was applied to know the difference in the level awareness of the AB-PMJAY scheme across gender of the beneficiaries.

RESULTS OF 'MANN-WHITNEY TEST'

Mann-Whitney U test like any other non-parametric test doesn't depend on assumptions on the distribution. It is used to compare the difference between the two dependent variables of two independent groups.⁶ The results of '**Mann-Whitney Test**' for testing significance difference in the level of awareness of the AB-PMJAY scheme across gender of the beneficiaries are as follows:

Table 2
Mann-Whitney U Test: Awareness level of 'the AB-PMJAY scheme' across 'Gender'

	Awareness level of the AB-PMJAY scheme across gender
Mann-Whitney U	1210.000
Wilcoxon W	2921.000
Z	-.056
Asymp. Sig. (2-tailed)	.955

To evaluate the difference in the awareness level of AB PM-JAY scheme across the gender of beneficiaries, both male and female beneficiaries were tested using '**Mann-Whitney Test**'. The test revealed statistically significant differences in awareness of the AB-PMJAY scheme across the gender of beneficiaries, $U = 1210.000$, $p < .05$. (Asmp. Sig. = .000).

Thus, based on the above inferences, the null hypothesis is accepted stating that there is no significant difference between level of awareness of the AB-PMJAY scheme and the gender of the beneficiaries.

CONCLUSION

It can be thus inferred from the above analysis and interpretation that there is no significant difference between level of awareness of the AB-PMJAY scheme and the gender of the beneficiaries. There can be several factors that affect the level of awareness of the beneficiaries with regards to the scheme and age of the beneficiaries is one of them. The present study could not find any difference between age and the level of awareness of the scheme. This could be because of the awareness level been checked of the beneficiaries who have availed the benefits of the scheme. Further, it can be also because of the female beneficiaries getting accompanied by a male accompanist.

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EMPOWERING WOMEN FOR SUSTAINABLE DEVELOPMENT IN INDIA: UNVEILING THEIR KEY ROLE

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ABSTRACT

This research paper aims to explore the critical role of women in empowering sustainable development in India. By investigating the multidimensional aspects of women's empowerment, including their contributions, challenges, and opportunities across various sectors, the paper seeks to unveil the transformative potential of women in achieving India's sustainable development goals (SDGs). Through an analysis of existing literature, case studies, and policy frameworks, this study sheds light on the indispensable role of women in promoting social, economic, and environmental sustainability in the Indian context.

Keywords: Women empowerment, sustainable development, gender equality, India, social sustainability, economic sustainability, environmental sustainability.

INTRODUCTION & BACKGROUND OF THE STUDY

India, as a rapidly developing country, faces numerous challenges on its path towards sustainable development. While progress has been made in various sectors, there are persistent issues such as poverty, gender inequality, inadequate access to education and healthcare, and environmental degradation that hinder the achievement of sustainable development goals (SDGs).

Gender equality and women's empowerment have gained increasing recognition as critical factors for achieving sustainable development. Women constitute nearly half of India's population and have immense potential to contribute to the country's development agenda. However, they continue to face significant social, economic, and cultural barriers that limit their participation and hinder their full potential.

Historically, women in India have been marginalized and excluded from decision-making processes and opportunities for socio-economic development. Discriminatory practices, patriarchal norms, and limited access to resources have perpetuated gender disparities and hindered progress. Recognizing this, efforts have been made to address these challenges and promote women's empowerment as a catalyst for sustainable development.

Several international frameworks, including the United Nations Sustainable Development Goals (SDGs), emphasize the importance of gender equality and women's empowerment as integral components of sustainable development. The SDGs provide a comprehensive framework for addressing the intersecting challenges faced by women, such as poverty, education, health, economic empowerment, and environmental sustainability.

India has also taken significant steps towards promoting gender equality and women's empowerment. Various government initiatives, policies, and programs have been implemented to address gender disparities and empower women across sectors such as education, health, employment, entrepreneurship, and political participation. These efforts aim to create an enabling environment that recognizes and supports the active role of women in sustainable development.

Given the context of India's socio-cultural diversity and the complexities of sustainable development, it is crucial to examine the specific role of women in driving sustainable development in the country. This research paper aims to delve into the multidimensional aspects of women's empowerment and highlight the key role that women play in achieving sustainable development goals in India. By understanding the challenges, opportunities, and contributions of women, policymakers and stakeholders can formulate targeted interventions and strategies to promote gender equality, empower women, and create a more inclusive and sustainable future for India.

REVIEW OF LITERATURE:**Gender Equality and Sustainable Development:**

Numerous studies have established a strong link between gender equality and sustainable development. Research by Kabeer (2019) highlights how gender disparities hinder economic growth and social development. The study emphasizes the need for women's empowerment as a driver of sustainable development, focusing on their role in poverty reduction, education, and health.

Women's Empowerment and Environmental Sustainability:

Studies have explored the connection between women's empowerment and environmental sustainability. Mehra and Agrawal (2020) argue that empowered women are more likely to engage in environmentally sustainable practices, such as resource conservation and renewable energy adoption. The research emphasizes the positive relationship between women's empowerment and environmental stewardship.

Women's Political Participation and Sustainable Development:

The political participation of women has significant implications for sustainable development. Research by Batliwala and Dhanraj (2018) highlights the transformative impact of women's political leadership on policy formulation and implementation for sustainable development. The study showcases examples of women leaders in India who have championed sustainable development initiatives.

Women's Role in Agricultural Sustainability:

Women play a critical role in agricultural sustainability, particularly in rural areas. Research by Rao et al. (2017) emphasizes the contribution of women farmers to food security and sustainable agricultural practices. The study highlights the need for recognizing and enhancing women's agency in agricultural decision-making and resource management.

Women's Entrepreneurship and Economic Sustainability:

Women's entrepreneurship is recognized as a key driver of economic sustainability. Studies by Gupta and Sharma (2019) and Datta et al. (2018) explore the challenges and opportunities faced by women entrepreneurs in India. These studies underscore the importance of policy support, access to finance, and skill development in promoting women's entrepreneurship for sustainable economic development.

Education and Women's Empowerment:

Education plays a pivotal role in women's empowerment and sustainable development. Research by Chakraborty et al. (2020) highlights the positive relationship between women's education and their decision-making power, health outcomes, and economic independence. The study emphasizes the need for gender-responsive education policies to promote sustainable development.

Health and Well-being of Women:

The health and well-being of women are crucial aspects of sustainable development. Studies by Ahmed et al. (2019) and George and Gowri (2021) focus on women's access to healthcare services, reproductive rights, and gender-based violence. These studies emphasize the importance of addressing women's health needs for sustainable development outcomes.

Role of Women in Renewable Energy:

Research has highlighted the role of women in promoting renewable energy and climate action. Studies by Sudha and Geetha (2019) and Kaur and Sahi (2018) showcase women's involvement in renewable energy initiatives, such as solar energy adoption and clean cooking practices. These studies emphasize the potential of women as change agents in addressing environmental challenges.

Empowering Women in Urban Development:

The role of women in sustainable urban development has gained attention. Research by D'Cruz and Mishra (2020) explores the challenges faced by women in urban areas and the need for inclusive urban planning and infrastructure. The study emphasizes the importance of women's safety, mobility, and participation in shaping sustainable cities.

Government Policies and Programs for Women's Empowerment:

Several studies have analyzed government initiatives and programs aimed at women's empowerment. Research by Singh et al. (2018) evaluates the effectiveness of policies and schemes targeting women's empowerment in India. The study identifies gaps and provides recommendations for enhancing the impact of these programs.

These studies collectively highlight the critical role of women in sustainable development in India. They emphasize the need for comprehensive approaches that address gender disparities, promote women's empowerment, and recognize their contributions.

RESEARCH PAPER OBJECTIVE:

The objective of this research paper is to unveil and highlight the key role of women in empowering sustainable development in India. The paper aims to achieve the following specific objectives:

- Examine the linkages between gender equality and sustainable development in the Indian context.

- Explore the multidimensional aspects of women's empowerment, including social, economic, and environmental dimensions.
- Identify the challenges and barriers faced by women in various sectors and their impact on sustainable development.
- Investigate the opportunities and potential for women's active participation in driving sustainable development.
- Analyze the role of women as agents of change in key sectors such as agriculture, health, education, renewable energy, and more.
- Evaluate existing government initiatives, policies, and programs promoting women's empowerment for sustainable development.
- Showcase case studies of successful women-led sustainable development projects and their lessons learned.
- Identify the gaps and barriers in current approaches and propose recommendations for enhancing women's empowerment for sustainable development.
- Provide insights and implications for policymakers, practitioners, and stakeholders to promote gender equality and women's empowerment in sustainable development efforts.
- Contribute to the existing knowledge base on the role of women in sustainable development, particularly in the Indian context, and identify areas for further research and exploration.

By addressing these objectives, the research paper aims to shed light on the transformative potential of women's empowerment in achieving sustainable development goals in India. It seeks to provide valuable insights and recommendations to inform policies, practices, and interventions that can empower women and create a more inclusive and sustainable future for India.

RESEARCH METHODOLOGY-

In this research paper, a mixed-methods approach will be employed to examine the role of women in empowering sustainable development in India. The research will primarily rely on secondary data sources, including academic journals, books, reports, and official publications from government agencies, non-governmental organizations (NGOs), and international development organizations. These sources will provide a comprehensive understanding of the existing literature, theoretical frameworks, and empirical studies on women's empowerment and sustainable development in the Indian context.

Secondary data analysis will involve reviewing and synthesizing the relevant literature, identifying key themes, and extracting relevant data points and evidence. This will enable a comprehensive exploration of the multidimensional aspects of women's empowerment and its relationship with sustainable development in India. The use of secondary data sources allows for a broad and comprehensive analysis of the topic, drawing on a range of perspectives and empirical studies.

Additionally, the research may also incorporate other sources of data, such as qualitative interviews or case studies, to provide in-depth insights and practical examples of women's empowerment initiatives and their impact on sustainable development. These sources can offer rich contextual information, personal narratives, and real-life experiences that supplement the findings from the secondary data analysis. Such data can be collected through interviews with key stakeholders, field observations, or analysis of project reports.

By combining secondary data analysis with potential supplementary data sources, this research will provide a comprehensive and nuanced understanding of the role of women in empowering sustainable development in India. The utilization of multiple data sources will enhance the validity and reliability of the findings and ensure a more comprehensive examination of the research topic.

THE LINK BETWEEN WOMEN'S EMPOWERMENT AND SUSTAINABLE DEVELOPMENT IN INDIA

The link between women's empowerment and sustainable development in India is a critical aspect to explore. Women's empowerment refers to the process of increasing their social, economic, and political power and agency, enabling them to participate fully in decision-making processes and have control over their lives. Sustainable development, on the other hand, encompasses economic growth, social inclusion, and environmental protection, aiming to meet the needs of the present generation without compromising the ability of future generations to meet their own needs.

In India, women's empowerment is directly linked to sustainable development on various fronts. Firstly, women's empowerment plays a crucial role in achieving gender equality, which is not only a fundamental human right but also a prerequisite for sustainable development. When women are empowered, they can actively contribute to economic growth through increased workforce participation, entrepreneurship, and innovation. This leads to poverty reduction, improved livelihoods, and overall economic development.

Moreover, women's empowerment is closely tied to social development. When women have access to education, healthcare, and decision-making platforms, they can influence positive social change within their families and communities. This includes improvements in maternal and child health, nutrition, education outcomes, and overall social well-being.

Furthermore, women's empowerment has a significant impact on environmental sustainability. Women often have a close relationship with natural resources and play a vital role in resource management, biodiversity conservation, and climate change adaptation. Their knowledge, skills, and traditional practices can contribute to sustainable agriculture, water management, renewable energy adoption, and environmental stewardship.

Overall, the link between women's empowerment and sustainable development in India is undeniable. By empowering women and ensuring their active participation in all spheres of life, India can harness their potential as agents of change, contributing to economic growth, social progress, and environmental sustainability. Policies and programs that promote gender equality, enhance women's access to resources and opportunities, and dismantle barriers to their empowerment are essential for achieving sustainable development goals in India.

CHALLENGES AND BARRIERS TO WOMEN'S EMPOWERMENT IN INDIA

Women's empowerment in India faces numerous challenges and barriers that hinder their progress and full participation in various spheres of life. These challenges arise from deep-rooted societal norms, cultural practices, and structural inequalities. Here are some key challenges and barriers to women's empowerment in India:

- **Gender Stereotypes and Discrimination:** Traditional gender roles and stereotypes restrict women's opportunities and limit their access to education, employment, and decision-making. Discrimination based on gender permeates various aspects of Indian society, reinforcing inequalities and hindering women's empowerment.
- **Limited Access to Education:** Unequal access to education remains a significant barrier to women's empowerment in India. Despite progress, many girls still face barriers such as early marriage, gender-based violence, and limited resources that prevent them from accessing quality education. Lack of education limits their economic prospects and hinders their ability to challenge societal norms.
- **Economic Disparities and Gender Pay Gap:** Women in India face significant economic disparities, including unequal wages compared to men for similar work. Limited access to financial resources, lack of property rights, and limited economic opportunities further restrict their ability to become economically empowered and independent.
- **Violence Against Women:** Gender-based violence, including domestic violence, sexual harassment, and dowry-related violence, continues to be a major challenge in India. Such violence not only violates women's rights but also restricts their mobility, stifles their voice, and hampers their overall empowerment.
- **Limited Political Representation:** Women's representation in political and decision-making positions remains low in India. Barriers such as cultural biases, limited support networks, and lack of access to resources often hinder women's entry into politics and their ability to shape policies that address gender disparities.
- **Social and Cultural Norms:** Deeply ingrained social and cultural norms often perpetuate gender inequalities and restrict women's choices and autonomy. Practices such as child marriage, dowry, and son preference reinforce patriarchal structures and hinder women's empowerment.
- **Lack of Healthcare and Reproductive Rights:** Limited access to quality healthcare services, including reproductive healthcare, negatively impacts women's well-being and limits their agency. Barriers such as lack of awareness, cultural taboos, and inadequate healthcare infrastructure contribute to women's vulnerability and undermine their empowerment.

Addressing these challenges requires a comprehensive approach involving legal reforms, policy interventions, and societal transformation. Efforts must focus on challenging gender stereotypes, improving access to education and healthcare, enhancing economic opportunities, promoting gender-responsive laws, and fostering a supportive environment that values and respects women's rights and empowerment.

OPPORTUNITIES AND STRATEGIES FOR WOMEN'S EMPOWERMENT IN SUSTAINABLE DEVELOPMENT

To promote women's empowerment in sustainable development, several opportunities and strategies can be implemented in India. These opportunities and strategies aim to address the existing challenges and promote gender equality, women's participation, and their access to resources and decision-making. Here are some key opportunities and strategies for women's empowerment in sustainable development:

- **Education and Skill Development:** Enhancing access to quality education and skill development programs is crucial for women's empowerment. By providing equal educational opportunities, promoting girls' education, and addressing barriers such as early marriage and gender-based violence, women can acquire knowledge, skills, and confidence to actively participate in sustainable development initiatives.
- **Economic Empowerment:** Promoting women's economic empowerment through entrepreneurship, income-generation programs, and financial inclusion can have significant impacts on sustainable development. This can be achieved by providing training, access to credit and markets, and fostering an enabling business environment for women-led enterprises. Closing the gender pay gap and promoting equal employment opportunities are also essential.
- **Leadership and Decision-making:** Increasing women's representation and leadership positions in political, business, and community spheres is crucial for their empowerment. Encouraging women's participation in decision-making processes, ensuring their voices are heard, and supporting their leadership development can contribute to more inclusive and effective sustainable development strategies.
- **Access to Healthcare and Reproductive Rights:** Ensuring women's access to quality healthcare services, including reproductive healthcare, is vital for their well-being and empowerment. This includes promoting awareness, improving healthcare infrastructure, and addressing cultural barriers to healthcare seeking behavior. Additionally, safeguarding reproductive rights and providing comprehensive family planning services can enable women to make informed choices about their reproductive health.
- **Technology and Innovation:** Leveraging technology and innovation can open up new opportunities for women's empowerment in sustainable development. Promoting digital literacy, facilitating access to technology, and supporting women's entrepreneurship in the digital economy can enhance their economic and social participation.
- **Gender-responsive Policies and Programs:** Implementing gender-responsive policies and programs that address women's specific needs and challenges is essential for their empowerment in sustainable development. This includes gender mainstreaming in development plans, ensuring equal access to resources and services, and addressing gender-based violence through legal and policy frameworks.
- **Awareness and Advocacy:** Raising awareness about women's rights, gender equality, and sustainable development is crucial for creating a supportive environment for women's empowerment. Engaging in advocacy efforts to challenge discriminatory norms and promote gender-responsive policies can create momentum for change and facilitate women's meaningful participation.

By capitalizing on these opportunities and implementing these strategies, India can unlock the full potential of women as agents of sustainable development. These initiatives should be implemented in collaboration with multiple stakeholders, including government agencies, civil society organizations, private sector entities, and international partners, to ensure their effectiveness and sustainability.

GOVERNMENT INITIATIVES AND POLICIES FOR WOMEN'S EMPOWERMENT

The Government of India has implemented several initiatives and policies to promote women's empowerment across various sectors. These initiatives aim to address gender disparities, enhance women's participation in decision-making, and provide equal opportunities for their economic, social, and political empowerment. Here are some key government initiatives and policies for women's empowerment in India:

- **Beti Bachao Beti Padhao (BBBP):** Launched in 2015, this initiative focuses on improving the welfare of girls and promoting their education. It aims to address the declining child sex ratio and combat gender-based discrimination through awareness campaigns, advocacy, and implementing girl-centric schemes.
- **Mahila-E-Haat:** This online platform facilitates the economic empowerment of women by promoting their entrepreneurship and showcasing their products. It provides a digital marketplace for women artisans, entrepreneurs, and self-help groups to showcase and sell their products.
- **Pradhan Mantri Matru Vandana Yojana (PMMVY):** This maternity benefit program provides financial support to pregnant and lactating women. It aims to ensure adequate nutrition during pregnancy and improve health-seeking behavior by providing cash incentives for early registration of pregnancy, antenatal check-ups, and institutional deliveries.
- **Mahila Shakti Kendra (MSK):** This initiative aims to empower rural women by providing them with training, skill development, and capacity building. It focuses on enhancing their leadership abilities, promoting women's self-help groups, and facilitating access to government schemes and services.
- **National Rural Livelihood Mission (NRLM):** NRLM aims to alleviate rural poverty and promote women's economic empowerment through the formation of self-help groups (SHGs). It provides training, access to credit, and market linkages to help women establish and manage income-generating activities.
- **Maternity Benefit Program:** The government has extended maternity leave to 26 weeks to ensure women's well-being during pregnancy and childbirth. It also mandates that organizations with a certain number of employees provide creche facilities for working mothers.
- **Reservation in Panchayati Raj Institutions:** The Constitution Amendment Act of 1992 introduced a provision for one-third reservation of seats for women in Panchayati Raj Institutions at the village, block, and district levels. This policy aims to enhance women's participation in decision-making and local governance.
- **Sexual Harassment of Women at Workplace (Prevention, Prohibition, and Redressal) Act:** This act mandates the establishment of internal complaints committees in workplaces to address cases of sexual harassment and ensure a safe working environment for women.

These initiatives and policies demonstrate the government's commitment to women's empowerment in various spheres. However, challenges remain in their effective implementation, reaching marginalized communities, and addressing deep-rooted gender inequalities. Continued efforts, monitoring, and evaluation are essential to ensure the success and impact of these initiatives, and further reforms may be required to strengthen women's empowerment in India.

LIMITATIONS OF THE STUDY-

While conducting research on empowering women for sustainable development in India and unveiling their key role, it is important to acknowledge certain limitations that may impact the scope and findings of the study. These limitations include:

- **Sample Size and Representativeness:** The study may face limitations in terms of the sample size and representativeness of the population. Due to constraints such as time, resources, and accessibility, it may not be possible to gather data from a large and diverse sample, which could affect the generalizability of the findings.
- **Data Availability and Reliability:** The availability and reliability of data related to women's empowerment and sustainable development in India can be a challenge. Existing data sources may have limitations in terms of comprehensiveness, accuracy, and consistency, which may impact the depth and reliability of the analysis.
- **Cultural and Regional Variations:** India is a diverse country with cultural, regional, and socio-economic variations. The study may not be able to capture the full range of experiences and perspectives of women across different states, communities, and social contexts. This could limit the generalizability of the findings and the ability to provide a comprehensive understanding of the role of women in sustainable development in all parts of India.

- **Bias and Subjectivity:** Research on women's empowerment and sustainable development can be influenced by biases, both conscious and unconscious. The researchers' own perspectives and biases may influence the selection and interpretation of data, potentially affecting the objectivity and validity of the study.
- **Time Constraints:** Conducting an in-depth study on the role of women in sustainable development requires sufficient time for data collection, analysis, and interpretation. However, time constraints may limit the depth and breadth of the study, leading to a partial understanding of the complex dynamics between women's empowerment and sustainable development in India.
- **Dynamic Nature of the Topic:** The field of sustainable development and women's empowerment is continually evolving, with new research, policies, and initiatives emerging over time. The study's findings may be influenced by the knowledge available up to the research cutoff date, and new developments may not be fully incorporated.

Despite these limitations, efforts will be made to mitigate them and provide a comprehensive analysis of the role of women in empowering sustainable development in India. By acknowledging these limitations, the research paper aims to provide a balanced interpretation of the findings and offer recommendations for future research and policy interventions.

SUGGESTION / SCOPE FOR FURTHER RESEARCH

While this research paper on empowering women for sustainable development in India aims to provide valuable insights, there are several areas that offer scope for further research. These include:

- **Intersectionality:** Further research can explore the intersectionality of women's empowerment and sustainable development in India. It can examine how factors such as caste, religion, ethnicity, and disability intersect with gender to shape women's experiences, challenges, and opportunities in different contexts.
- **Long-term Impact:** Future studies can focus on evaluating the long-term impact of women's empowerment initiatives on sustainable development outcomes in India. This can involve longitudinal research designs to assess the sustainability and effectiveness of interventions over time.
- **Policy Implementation and Evaluation:** Research can examine the implementation and effectiveness of government policies and programs promoting women's empowerment for sustainable development. It can analyze the gaps, barriers, and strategies for enhancing policy implementation and evaluating their impact on women's lives.
- **Technology and Innovation:** Investigating the role of technology and innovation in empowering women for sustainable development in India can be an interesting area of research. This can include studying the use of digital platforms, mobile technology, and innovative solutions in addressing gender disparities and promoting women's economic and social empowerment.
- **Rural-Urban Divide:** Further research can explore the differential experiences of women in rural and urban areas concerning sustainable development. It can examine the unique challenges, opportunities, and strategies required to empower women in different geographical contexts and address the rural-urban divide.
- **Climate Change and Resilience:** Research can delve into the role of women in climate change mitigation, adaptation, and building resilience in India. It can explore how women can contribute to sustainable development through their involvement in environmental conservation, disaster management, and climate-smart practices.
- **Private Sector Engagement:** Further studies can explore the role of the private sector in empowering women for sustainable development in India. This can include examining corporate social responsibility initiatives, women's entrepreneurship, and partnerships between the private and public sectors to promote gender equality and sustainable development.
- **Youth Perspective:** Research can focus on the perspectives and experiences of young women and girls in relation to sustainable development and women's empowerment. It can explore the aspirations, challenges, and innovative approaches adopted by the younger generation in promoting sustainable development in India.

By conducting research in these areas, scholars and policymakers can gain a deeper understanding of the complex dynamics between women's empowerment and sustainable development in India and identify strategies to foster more inclusive and sustainable outcomes.

SUMMARY/CONCLUSION:

In conclusion, this research paper has explored the crucial role of women in empowering sustainable development in India. It has shed light on the multidimensional aspects of women's empowerment, including their contributions, challenges, and opportunities across various sectors. The findings underscore the transformative potential of women in achieving India's sustainable development goals (SDGs).

The literature review has highlighted the strong linkages between gender equality and sustainable development, emphasizing the need for women's empowerment as a catalyst for social, economic, and environmental sustainability. Women's active participation has been identified as essential in driving positive change in areas such as agriculture, health, education, renewable energy, and urban development.

However, it is important to acknowledge the limitations of the study, including sample size and representativeness, data availability and reliability, and cultural and regional variations. These limitations should be considered when interpreting the findings and applying them to diverse contexts within India.

Despite these limitations, the research paper provides valuable insights and recommendations. It emphasizes the need for comprehensive approaches that address gender disparities, promote women's empowerment, and recognize their contributions. The findings suggest that enhancing women's access to education, healthcare, economic opportunities, and decision-making platforms is crucial for achieving sustainable development in India.

Moreover, the paper highlights the importance of government policies and programs in promoting women's empowerment for sustainable development. It calls for the evaluation of existing initiatives and the identification of gaps to enhance their effectiveness. The private sector's engagement and the utilization of technology and innovation are also identified as areas for further exploration.

In conclusion, empowering women for sustainable development in India is a vital endeavor. By recognizing the key role of women and addressing the challenges they face, India can unlock their full potential, create a more inclusive society, and achieve sustainable development for the benefit of all its citizens.

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JUDICIAL REVIEW AND ADMINISTRATIVE ADJUDICATION IN INDIA: AN INQUIRY INTO THE TRIBUNAL SYSTEM AND ITS EVOLVING JURISPRUDENCE

Harshita Bhardwaj¹ and Dr. Shameem Ahmed Khan²¹Research Scholar, Department of Law, ISBM University, Raipur (C.G.)²Assistant Professor, Department of Law, ISBM University, Raipur (C.G.)**ABSTRACT**

The Indian legal framework integrates administrative adjudication and judicial review to balance governmental efficiency and constitutional oversight. Tribunals have been established to ease the burden on courts while ensuring specialized adjudication. However, concerns regarding executive control, procedural inefficiencies, and judicial intervention have shaped the evolving jurisprudence of tribunals in India. This article provides an in-depth examination of the tribunal system, its constitutional and statutory foundation, significant judicial interpretations, and the broader implications of judicial review on tribunal autonomy. Using a doctrinal research methodology, this study contextualizes the role of tribunals in Indian administrative law, emphasizing the implications of key judgments and proposed reforms.

INTRODUCTION

The Indian judiciary is tasked with upholding the rule of law, ensuring governmental accountability, and protecting fundamental rights. Judicial review, an essential aspect of constitutional governance, enables courts to oversee administrative and legislative actions. Tribunals, as quasi-judicial bodies, were introduced to provide specialized adjudication in specific areas of law. The establishment of tribunals aims to enhance efficiency, reduce litigation costs, and introduce subject-matter expertise into dispute resolution (Jain, 2016).

While tribunals were conceived as independent adjudicatory bodies, their relationship with the judiciary has remained contentious. Courts have consistently asserted their power of judicial review over tribunal decisions, ensuring constitutional compliance. However, executive interference in tribunal appointments, tenure, and administrative functions has raised concerns about the independence of these bodies (Basu, 2017). This article critically examines the interplay between judicial review and administrative adjudication in India, with a focus on the tribunal system and its evolving jurisprudence.

Concept of Judicial Review in India

Judicial review refers to the power of courts to examine the legality of legislative and executive actions. The Indian Constitution expressly provides for judicial review under Articles 32, 136, 226, and 227, empowering the Supreme Court and High Courts to adjudicate matters involving fundamental rights and statutory interpretation. Judicial review in India derives its legitimacy from the separation of powers doctrine and the principles of constitutional supremacy, ensuring that all administrative actions comply with the Constitution.

The concept of judicial review as a fundamental tenet of constitutional governance has been recognized through numerous judicial pronouncements. The Supreme Court, in *Kesavananda Bharati v. State of Kerala* (1973), held that judicial review is an integral component of the basic structure of the Constitution, preventing the state from enacting arbitrary or unconstitutional laws. Subsequent rulings, including *Minerva Mills Ltd. v. Union of India* (1980), further reinforced this doctrine by emphasizing the importance of judicial oversight in preserving democratic governance (Seervai, 2019).

Judicial review of administrative actions is based on the principles of legality, rationality, and procedural propriety. The courts examine whether an administrative body has acted beyond its statutory power, whether the decision-making process was arbitrary or capricious, and whether principles of natural justice were adhered to. The landmark ruling in *Union of India v. R. Gandhi* (2010) underscored the importance of judicial oversight in ensuring that tribunals function as effective adjudicatory bodies without usurping the constitutional role of High Courts (Thiruvengadam, 2019).

Evolution of Administrative Adjudication in India

The concept of administrative adjudication in India has evolved in response to the increasing complexity of governmental functions. As the modern state expanded its regulatory and welfare responsibilities, traditional courts faced challenges in addressing disputes requiring technical expertise and swift resolution. This led to the establishment of specialized tribunals tasked with adjudicating matters in specific legal domains.

The Swaran Singh Committee (1976) played a crucial role in recommending the establishment of tribunals to handle disputes requiring subject-matter expertise. This resulted in the enactment of the Administrative

Tribunals Act, 1985, which provided for the creation of the Central Administrative Tribunal (CAT) and State Administrative Tribunals (SATs). The objective was to provide government employees with a specialized forum for resolving service-related disputes, thereby reducing the caseload on High Courts and ensuring expeditious justice (Jain, 2016).

The role of administrative tribunals expanded beyond service matters, leading to the establishment of a diverse range of tribunals in sectors such as taxation, environmental law, company law, and intellectual property. The Income Tax Appellate Tribunal (ITAT), National Green Tribunal (NGT), and National Company Law Tribunal (NCLT) exemplify the increasing reliance on tribunals for specialized adjudication. However, concerns regarding tribunal independence, executive control, and procedural inconsistencies have persisted, necessitating judicial intervention and legislative reforms.

Judicial Pronouncements on Tribunal Independence The Supreme Court has played a pivotal role in defining the relationship between tribunals and the judiciary, emphasizing the need for tribunal independence and procedural fairness. Several landmark judgments have shaped the evolving jurisprudence on administrative adjudication in India.

In *S.P. Sampath Kumar v. Union of India* (1987), the Supreme Court upheld the constitutionality of CAT while recognizing the potential risks of executive dominance over tribunals. The Court emphasized the need for judicial safeguards to ensure that tribunals function as effective alternatives to High Courts (Basu, 2017). The decision marked an important step in acknowledging the role of tribunals while maintaining judicial oversight.

The ruling in *L. Chandra Kumar v. Union of India* (1997) was a watershed moment in the jurisprudence of tribunal independence. The Supreme Court held that tribunal decisions remain subject to judicial review under Articles 226 and 227, reinforcing the principle that tribunals serve as supplementary rather than substitutive judicial bodies. This judgment reaffirmed the role of High Courts in ensuring that tribunals function within constitutional parameters (Thakker, 2018).

Subsequent rulings, including *Madras Bar Association v. Union of India* (2020), addressed concerns related to executive interference in tribunal appointments and tenure security. The Court struck down provisions in the Tribunal Reforms Act, 2021, which granted excessive executive control over tribunal administration. By reaffirming the principles of judicial independence and institutional integrity, the ruling underscored the necessity of safeguarding tribunals from undue political influence (Rao, 2021).

Challenges and Reforms in the Tribunal System Despite judicial interventions, several challenges continue to affect the efficiency and autonomy of tribunals in India. Executive influence over appointments, funding, and administrative decisions undermines the credibility of tribunals as independent adjudicatory bodies. Procedural delays, lack of uniform rules, and limited accessibility further exacerbate concerns regarding tribunal effectiveness.

To address these challenges, judicial and legislative reforms have been proposed, including the establishment of a National Tribunal Commission to oversee appointments and administration. Enhancing digital integration in tribunal processes can improve access to justice and streamline case management. Standardizing procedural rules across tribunals can mitigate inconsistencies and enhance predictability in adjudication. These reforms aim to strengthen tribunal independence, ensuring that administrative adjudication aligns with constitutional principles and enhances the overall efficiency of the judicial system (Singh, 2020).

CONCLUSION

The interplay between judicial review and administrative adjudication in India remains a dynamic and evolving aspect of constitutional law. While tribunals play a crucial role in specialized adjudication, judicial review serves as a safeguard against executive overreach and procedural arbitrariness. The jurisprudence surrounding tribunal independence underscores the judiciary's commitment to upholding constitutional principles and ensuring access to justice. Future reforms must focus on enhancing institutional autonomy, streamlining procedural efficiency, and reinforcing judicial safeguards to create a more robust and effective tribunal system in India.

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CONSUMER BEHAVIOUR IN THE AGE OF DIGITAL ADVERTISING: TRENDS AND INSIGHTS

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ABSTRACT

The rapid evolution of digital advertising has significantly reshaped consumer behavior, influencing purchasing decisions, brand engagement, and marketing interactions. With the rise of AI-driven personalization, social media marketing, and immersive advertising technologies, businesses can target consumers with unprecedented precision. However, this transformation also raises concerns about privacy, data security, and ethical advertising practices. This paper explores the latest trends in consumer behavior within the digital advertising landscape, analyzing the impact of personalized marketing, influencer-driven promotions, and emerging technologies like augmented reality (AR) and virtual reality (VR). Additionally, it examines consumer trust, data transparency, and regulatory challenges in digital marketing. By reviewing current research and industry practices, this study provides insights into how digital advertising shapes consumer decision-making and engagement, emphasizing the need for ethical and data-driven marketing strategies.

Keywords: Consumer behavior, digital advertising, personalized marketing, influencer marketing, social media, artificial intelligence, data privacy, augmented reality, virtual reality, ethical advertising, marketing strategies.

INTRODUCTION

The rapid evolution of digital advertising has profoundly reshaped consumer behavior, influencing how individuals engage with brands, make purchasing decisions, and interact with marketing content. In an era where consumers are inundated with targeted ads, personalized recommendations, and immersive brand experiences across multiple digital platforms, understanding their behavior has become more complex than ever. The proliferation of social media, search engines, e-commerce platforms, and artificial intelligence-driven marketing has enabled businesses to reach consumers with unprecedented precision. Data analytics, machine learning algorithms, and predictive modeling have further refined marketing strategies, ensuring that advertising content aligns closely with consumer preferences and interests. However, this digital transformation has also raised concerns about privacy, data security, and the ethical implications of targeted advertising, leading consumers to demand greater transparency and control over their personal information. Additionally, the shift from traditional media to digital platforms has empowered consumers with more autonomy in their purchasing journey, allowing them to compare products, read reviews, and seek peer recommendations before making informed decisions. The rise of influencer marketing, interactive advertisements, and user-generated content has further blurred the lines between organic consumer engagement and paid promotions, creating a complex landscape where trust and authenticity play a crucial role in shaping consumer attitudes. Moreover, emerging technologies such as augmented reality (AR), virtual reality (VR), and voice search have introduced new dimensions to digital advertising, enhancing user experiences and redefining how consumers perceive brands. The integration of AI-powered chatbots, programmatic advertising, and hyper-personalization techniques has enabled businesses to deliver highly relevant and engaging content, yet it has also sparked debates on the potential manipulation of consumer behavior. As digital advertising continues to evolve, businesses must adapt to changing consumer expectations, leveraging ethical and data-driven strategies to foster meaningful connections with their target audiences. This review article explores the latest trends and insights in consumer behavior within the digital advertising landscape, examining the impact of personalization, social influence, technological advancements, and ethical considerations on consumer decision-making. By analyzing recent research, industry case studies, and expert perspectives, this study aims to provide a comprehensive understanding of how digital advertising shapes consumer psychology, engagement patterns, and purchasing behaviors in the modern digital age.

LITERATURE REVIEW

The study of consumer behavior in the digital advertising landscape has garnered significant attention in recent years, with researchers exploring the psychological, technological, and strategic dimensions influencing modern consumer decision-making. Digital advertising leverages personalization, interactivity, and data-driven insights to engage consumers more effectively than traditional marketing channels (Lamberton & Stephen, 2016). The shift toward targeted advertising, facilitated by artificial intelligence (AI) and machine learning, has enabled businesses to predict consumer preferences and deliver highly relevant content, enhancing engagement and conversion rates. However, concerns over privacy and data security remain central to consumer attitudes, with

empirical studies indicating that excessive personalization can lead to privacy fatigue and reduced trust in brands (Aguirre et al., 2015). Social media platforms have emerged as dominant forces in shaping consumer behavior, with influencer marketing, user-generated content, and interactive advertisements playing critical roles in purchase decisions (Hudders et al., 2021). Research suggests that consumers perceive influencer endorsements as more authentic compared to traditional advertising, increasing brand credibility and fostering higher engagement levels (De Veirman, Cauberghe, & Hudders, 2017). Additionally, the advent of augmented reality (AR) and virtual reality (VR) in advertising has transformed consumer experiences by providing immersive product interactions that enhance purchase intent and brand recall. Programmatic advertising and real-time bidding have revolutionized digital ad placements, allowing businesses to optimize their marketing strategies based on real-time consumer behavior analytics (Liu-Thompkins, 2019). While digital advertising enhances consumer engagement, studies highlight the growing resistance to intrusive ad formats, with many consumers using ad-blockers to counteract excessive exposure to targeted ads (Redondo & Aznar, 2018). Ethical considerations in AI-driven advertising have also been explored, with scholars advocating for greater transparency, accountability, and consumer control over personal data (Martin & Murphy, 2017). As digital marketing strategies continue to evolve, businesses must balance technological innovation with ethical consumer engagement to foster long-term brand trust and loyalty. This review synthesizes existing research on digital advertising's impact on consumer behavior, highlighting key trends, challenges, and opportunities in the evolving digital marketplace.

THE EVOLUTION OF DIGITAL ADVERTISING

The evolution of digital advertising has been marked by rapid technological advancements, shifting consumer behaviors, and the increasing sophistication of marketing strategies. From its inception, digital advertising has undergone a significant transformation, fueled by the growth of the internet, social media platforms, and mobile technology. Initially, digital ads were basic banner advertisements placed on websites, offering limited targeting capabilities and primarily relying on impression-based metrics. These early forms of online ads were often static and intrusive, leading to a negative consumer perception, especially as the internet became saturated with advertisements.

However, as the internet matured, so did digital advertising, with the rise of search engines like Google, which introduced search engine marketing (SEM). This allowed advertisers to target consumers based on their search queries, providing a more relevant and intent-driven advertising approach. The shift from passive display ads to more interactive and intent-based strategies marked the beginning of a new era in digital advertising. By the mid-2000s, social media platforms like Facebook and Twitter revolutionized advertising by enabling precise demographic and behavioral targeting, tapping into vast pools of consumer data and creating hyper-personalized experiences (Lamberton & Stephen, 2016). The ability to track user activities, preferences, and interactions with content allowed marketers to move beyond generic messaging to highly tailored advertisements that resonated with individual consumers.

The next phase of digital advertising saw the integration of programmatic advertising, which utilized automated systems to purchase and place ads in real-time, optimizing campaigns based on consumer behavior data (Liu-Thompkins, 2019). Programmatic buying enabled advertisers to achieve greater efficiency and relevance, making it easier to manage large-scale ad campaigns with precision. Additionally, mobile advertising emerged as a dominant force, as the proliferation of smartphones and mobile apps provided advertisers with new opportunities to engage consumers on-the-go. Location-based ads, in-app advertisements, and push notifications became powerful tools for reaching consumers in real-time, further refining targeting capabilities.

In recent years, the rise of AI and machine learning has taken digital advertising to new heights, enabling brands to use predictive analytics, chatbots, and personalized content delivery at scale (Chaffey, 2020). These technologies have empowered marketers to deliver real-time, dynamic content that adapts to consumer behaviors, preferences, and contextual factors, providing an even more seamless and engaging experience. Moreover, the incorporation of emerging technologies such as augmented reality (AR), virtual reality (VR), and voice search has redefined how digital ads are experienced, making them more immersive and interactive. Despite the innovation, challenges remain in balancing personalized advertising with privacy concerns, as consumers become increasingly aware of the data collection processes behind digital ads (Martin & Murphy, 2017). The evolution of digital advertising reflects an ongoing shift toward more relevant, consumer-centric marketing practices, driven by technological advancements and an ever-expanding understanding of consumer behavior.

CONSUMER BEHAVIOUR

The study of consumer behavior has evolved through various theoretical frameworks that attempt to explain the cognitive, emotional, and social processes driving consumer decisions. These frameworks provide valuable insights for marketers to design effective strategies that align with consumer motivations and preferences. One of the most influential theories is the Theory of Planned Behavior (TPB), developed by Ajzen, 1991), which suggests that consumer behavior is driven by attitudes toward a behavior, subjective norms, and perceived behavioral control. This model highlights that intention, influenced by these factors, is a significant predictor of actual consumer behavior. According to TPB, understanding these psychological determinants can help predict how consumers will respond to advertising or promotional efforts, particularly in the digital realm.

Another pivotal framework is Maslow's Hierarchy of Needs (1943), which posits that consumer decisions are influenced by a range of needs, starting from basic physiological requirements to higher-order needs like self-actualization. In the context of digital advertising, marketers often target different levels of this hierarchy, emphasizing security, belonging, or self-esteem through personalized ads. Consumers in digital environments are increasingly seeking experiences that fulfill not only their functional needs but also emotional and aspirational ones.

The Stimulus-Organism-Response (S-O-R) model, proposed by Mehrabian and Russell (1974), has also been applied extensively to understand consumer responses to marketing stimuli. This model posits that external stimuli (such as advertisements) influence the internal state (organism), which in turn affects consumer behavior (response). This framework is particularly relevant in the digital age, where online environments act as stimuli that trigger emotional and cognitive responses in consumers, influencing their purchasing behavior. For instance, interactive digital ads, website design, and even brand storytelling can evoke emotional reactions that shape consumer decisions.

The Cognitive Dissonance Theory, introduced by Festinger (1957), further enriches the understanding of consumer behavior by emphasizing the discomfort consumers experience when their beliefs or attitudes contradict their actions. In the context of digital advertising, cognitive dissonance can arise when consumers' purchase decisions conflict with their previously held beliefs, such as buying an expensive product after advocating for frugality. Marketers can use this theory to reduce dissonance through post-purchase communications or incentives that reinforce the consumer's choice.

Moreover, the Engagement Theory (Brodie et al., 2013) has gained prominence in digital marketing research. This framework explores how consumers interact emotionally, cognitively, and behaviorally with brands, especially on digital platforms. With the rise of social media and influencer marketing, the emotional and relational aspects of engagement have become central to understanding consumer behavior in digital spaces. According to this theory, deeper consumer engagement fosters stronger brand loyalty and higher purchase intentions.

These theoretical frameworks provide marketers with essential tools for understanding and predicting consumer behavior in the complex digital advertising environment. By leveraging these models, businesses can create more targeted, effective advertising strategies that align with consumers' psychological, emotional, and cognitive processes.

KEY TRENDS IN CONSUMER BEHAVIOUR IN DIGITAL ADVERTISING

The landscape of digital advertising has witnessed significant shifts in consumer behavior driven by technological advancements, new marketing strategies, and evolving consumer preferences. These shifts are crucial for understanding how businesses connect with consumers in an increasingly digital world.

Personalization and Targeted Marketing

AI-driven advertising and predictive analytics have revolutionized personalized marketing. Artificial intelligence (AI) allows advertisers to analyze consumer data in real-time, enabling them to predict future behaviors and preferences. By utilizing machine learning algorithms, companies can deliver highly tailored ads to individuals based on past behaviors, demographics, and interests, improving ad relevance and engagement. Predictive analytics enhances this by forecasting consumer actions, enabling businesses to craft proactive marketing strategies that resonate with their target audience before they even express intent.

Personalization is further enhanced through the use of cookies, big data, and AI. Cookies track users' online activities, providing insights into browsing history, which can be leveraged to deliver more relevant ads. Big data amplifies this by aggregating vast amounts of consumer information from various sources, allowing for even finer segmentation and highly customized content. AI then analyzes this data to deliver predictive,

personalized experiences that meet the specific needs and desires of the consumer, increasing the likelihood of conversions.

Social Media and Influencer Marketing

The rise of social media and influencer marketing has significantly influenced consumer behavior. Influencers and user-generated content have become central to shaping consumer perceptions. Research indicates that consumers trust recommendations from influencers more than traditional advertising (De Veirman et al., 2017). Influencers create authentic connections with their audiences, which leads to greater consumer trust and engagement. User-generated content (UGC) on platforms like Instagram, YouTube, and TikTok also plays a pivotal role in brand engagement by fostering community-driven conversations around products and services (Hudders et al., 2021).

Brand engagement through social platforms has become a key metric for measuring success in digital advertising. Social media platforms allow brands to interact directly with consumers, receiving immediate feedback and fostering a sense of loyalty and community. Engagement on these platforms often drives purchasing decisions, as consumers are influenced not only by influencers but also by peer reviews and interactions on these platforms.

Mobile and In-App Advertising

The advent of mobile and in-app advertising has significantly shaped consumer behavior. M-commerce (mobile commerce) continues to grow, with consumers increasingly making purchases through mobile apps. This trend has led to a rise in app-based ads, which offer targeted, location-based advertisements. Mobile ads are particularly effective because they capitalize on the user's immediate location and behavior, creating an opportunity for highly relevant and timely marketing messages.

Location-based and push notification marketing are key strategies within mobile advertising. These techniques allow marketers to send real-time, location-specific offers to consumers, increasing the chances of immediate action. For example, a consumer walking by a coffee shop might receive a push notification for a special discount. This immediate, context-aware form of advertising enhances consumer engagement and drives impulse purchases.

Interactive and Immersive Advertising

The rise of interactive and immersive advertising has transformed consumer engagement. Augmented Reality (AR) and Virtual Reality (VR) technologies have become valuable tools in digital marketing by allowing consumers to experience products in a virtual space before making a purchase decision. AR and VR enable consumers to interact with brands in ways that were previously impossible, offering them a more immersive and engaging experience. This trend has seen applications in industries like fashion, where consumers can "try on" clothes virtually, or in real estate, where potential buyers can take virtual tours of properties.

Gamification in advertising also plays a significant role in creating interactive experiences. By incorporating game-like elements such as rewards, challenges, and leaderboards, marketers increase user engagement and brand interaction. Gamification encourages consumers to participate in brand-driven activities, enhancing both brand loyalty and consumer satisfaction.

Consumer Trust and Privacy Concerns

As digital advertising becomes more personalized, consumer trust and privacy concerns have emerged as significant factors influencing consumer behavior. The implementation of data privacy regulations such as the General Data Protection Regulation (GDPR) in the EU and the California Consumer Privacy Act (CCPA) has forced businesses to be more transparent about data collection practices. These regulations aim to give consumers more control over their personal data, addressing the growing concerns about privacy violations and data breaches (Martin & Murphy, 2017).

Additionally, consumer perception of intrusive advertising has become a major issue. With the increasing prevalence of targeted ads, many consumers feel overwhelmed by the constant barrage of marketing messages. Studies show that consumers often view excessive personalization as an invasion of privacy, leading them to opt-out of targeted ads or use ad blockers (Redondo & Aznar, 2018). This highlights the need for marketers to balance personalization with respect for consumer privacy to maintain trust and engagement.

IMPACT OF DIGITAL ADVERTISING ON CONSUMER DECISION-MAKING

Digital advertising has dramatically transformed how consumers make purchase decisions by influencing them at various stages of the buying process. These ads utilize a blend of personalization, interactivity, and real-time

data analytics to guide consumers through their decision-making journey. The impact of digital ads can be seen in the following key aspects:

Role of Digital Ads in Different Stages of the Buying Process

Digital advertisements play a critical role in all stages of the consumer buying process: awareness, consideration, decision, and post-purchase evaluation. In the awareness stage, digital ads serve as the first touchpoint, introducing consumers to products and services they may not have encountered before. Through platforms like Google Ads, Facebook, and Instagram, businesses can create highly targeted campaigns that reach consumers based on their demographics, interests, and browsing behavior. In the consideration stage, digital ads provide consumers with more detailed information, such as product features, benefits, and comparisons. Dynamic retargeting ads, for example, show products that consumers have previously viewed, keeping the product top-of-mind and encouraging them to explore further. In the decision stage, digital advertising tactics like limited-time offers, special discounts, and personalized recommendations play a pivotal role in converting interest into action. Finally, in the post-purchase evaluation stage, digital ads may serve as reminders, offering complementary products or encouraging customers to share their experiences on social media (Liu-Thompkins, 2019). This cyclical engagement helps nurture customer loyalty and repeat purchases.

Online Reviews, Ratings, and Peer Recommendations

With the rise of e-commerce and social media, online reviews, ratings, and peer recommendations have become crucial factors in consumer decision-making. Digital advertising has increasingly integrated social proof elements such as customer testimonials and user-generated content into ad campaigns. According to research by Chen et al., 2022, consumers trust online reviews more than traditional advertising because they view reviews as more authentic and less biased. The influence of peer recommendations is amplified through social media platforms where consumers share experiences, provide ratings, and recommend products to their network. This peer-driven content often shapes consumer perceptions, fostering trust and influencing purchase intent (Gwinner et al., 2019). As such, businesses increasingly integrate online reviews and ratings into their digital ad strategies to build credibility and increase consumer confidence in their offerings.

Retargeting and Impulse Buying Behaviour

Retargeting is one of the most effective digital advertising strategies in influencing consumer behavior, especially in driving impulse purchases. Retargeting ads appear to consumers after they have interacted with a brand's website or social media page but did not make a purchase. These ads follow the consumer across the web, reminding them of the product or service they viewed. The frequent exposure to these reminders can create a sense of urgency or a "fear of missing out" (FOMO), leading consumers to reconsider their previous hesitation and make an impulse purchase. Research suggests that retargeted ads significantly increase the likelihood of purchase because they re-engage consumers who are already familiar with the product. Impulse buying behavior is further driven by the hyper-targeted nature of digital ads, which deliver promotions based on consumer preferences, browsing history, and location. As a result, consumers are more likely to make unplanned purchases when they encounter relevant offers at the right moment.

Overall, digital advertising profoundly shapes consumer decision-making by influencing how they perceive products, assess alternatives, and ultimately make purchasing decisions. The integration of online reviews, retargeting, and personalized ads across the customer journey has become a powerful force in driving consumer behavior.

CHALLENGES AND ETHICAL CONSIDERATIONS IN DIGITAL ADVERTISING

Digital advertising, while highly effective, also faces significant challenges and ethical concerns. As advertising becomes increasingly pervasive and sophisticated, both consumers and marketers must navigate the complexities that arise from excessive exposure, privacy violations, and deceptive practices. The following points address some of the key challenges and ethical issues that have emerged in the digital advertising landscape:

Ad Fatigue and Consumer Resistance to Ads

Ad fatigue is a growing concern in digital advertising, as consumers are bombarded with an overwhelming number of ads across various digital platforms daily. With the rise of targeted ads, consumers are often exposed to the same ad repeatedly, which can lead to disengagement and resistance. Overexposure to repetitive advertising can result in a phenomenon called "banner blindness," where consumers mentally tune out ads, rendering them ineffective. This resistance is further exacerbated by the increasing use of ad-blocking tools, with reports showing that nearly 30% of internet users employ ad-blockers. As a result, advertisers face the challenge of keeping their campaigns fresh, engaging, and non-intrusive to avoid alienating consumers. To

mitigate ad fatigue, marketers are focusing on personalized and dynamic content, which tailors ads to individual preferences, but even this has limitations as consumers grow more savvy about the technology behind these tactics.

Ethical Concerns in Targeted Advertising

One of the most contentious issues in digital advertising is the ethical implications of highly personalized targeting. While targeted ads based on user behavior, demographics, and preferences can be highly effective, they raise serious concerns about privacy invasion and data exploitation. Consumers often feel uncomfortable with the amount of personal information advertisers collect, sometimes without their full knowledge or consent. This practice, particularly in the case of third-party data sharing and tracking cookies, can be seen as intrusive, especially when the boundaries of personal space are violated without explicit consent. Furthermore, the use of algorithms to predict consumer behavior can sometimes lead to discriminatory practices or reinforce harmful stereotypes (O'Neil, 2016). The ethical dilemma surrounding data privacy and targeted advertising has led to increased calls for more transparency and regulation, such as the implementation of the General Data Protection Regulation (GDPR) in Europe, which aims to give consumers more control over their personal data.

Fake Reviews and Deceptive Marketing Tactics

The rise of online reviews and ratings has created new avenues for businesses to promote their products, but it has also opened the door to fraudulent practices such as fake reviews and deceptive marketing tactics. Some companies resort to paying individuals or using bots to create positive fake reviews, artificially boosting their reputation and misleading consumers into making purchases based on false information. This practice undermines consumer trust and can lead to significant reputational damage when discovered (Luca, 2016). Similarly, deceptive marketing tactics, such as false advertising or hidden fees, are increasingly prevalent in digital advertising. These tactics often exploit the trust consumers place in digital platforms, leading to a lack of transparency and potentially causing financial harm to consumers. The rise of influencer marketing, where brands pay influencers to promote products, further complicates ethical concerns. Without clear disclosure, consumers may not always be aware that a post is sponsored, leading to the manipulation of their purchasing decisions without their full awareness.

In response to these ethical concerns, regulatory bodies and industry associations have implemented guidelines and measures to ensure more transparent and ethical advertising practices. However, challenges remain as digital advertising continues to evolve, and the need for responsible advertising practices has never been greater.

FUTURE DIRECTIONS AND EMERGING INSIGHTS

As digital advertising continues to evolve, several emerging technologies and trends are shaping the future of consumer behavior research and marketing strategies. These include the integration of AI and machine learning for predictive insights, the use of blockchain for transparency, and the increasing importance of sustainability and ethical advertising practices.

AI and Machine Learning in Predictive Consumer Behaviour

Artificial Intelligence (AI) and machine learning (ML) have already begun to revolutionize digital advertising by enabling advertisers to predict consumer behavior with a high degree of accuracy. These technologies analyze large volumes of data from consumer interactions, purchases, preferences, and social media activity to predict future actions. AI-powered systems can segment consumers based on their behavior patterns and predict their likelihood to engage with specific ads or make a purchase (Chaffey, 2021). Machine learning algorithms can continuously learn from new data, improving ad targeting and personalization over time. For instance, AI tools are being used to predict which products a consumer is most likely to buy next based on their browsing history and demographic factors. This predictive capability allows advertisers to deliver personalized content to the right individual at the right moment, significantly improving conversion rates and enhancing customer experiences. The future of digital advertising will likely see an even greater reliance on AI and ML to optimize targeting, forecast trends, and understand consumer decision-making at a granular level.

Blockchain and Transparency in Digital Advertising

Blockchain technology, most commonly associated with cryptocurrencies, is gaining traction in the digital advertising space due to its ability to provide transparency, traceability, and security in ad transactions. Digital advertising has long faced challenges such as ad fraud, lack of transparency, and inefficient payment systems. Blockchain offers solutions by enabling decentralized and immutable records of transactions. Every ad impression, click, and transaction can be recorded on the blockchain, creating a transparent and verifiable trail that reduces the risk of fraud. For advertisers and consumers alike, this transparency can foster greater trust in digital advertising by providing clarity about how ad budgets are spent and how consumers are being targeted.

Additionally, blockchain-based solutions can enable more efficient and secure transactions between advertisers, publishers, and consumers, reducing intermediaries and ensuring that ad revenue is fairly distributed. As the technology matures, blockchain could significantly reshape how digital ads are bought and sold, creating a more ethical and efficient advertising ecosystem.

Sustainability and Ethical Advertising Trends

As consumers become more socially and environmentally conscious, there is an increasing demand for sustainability and ethical considerations in advertising. Brands are expected to demonstrate a commitment to sustainability not just in their products, but also in their advertising practices. Sustainable advertising focuses on promoting eco-friendly products, reducing resource consumption, and using environmentally responsible production methods for ads. Consumers are becoming more discerning about the values that brands espouse, leading to a rise in ethical advertising that prioritizes honesty, transparency, and social responsibility. Marketers are also under pressure to reduce the environmental impact of digital advertising itself, including the carbon footprint of data storage and delivery (Poortinga et al., 2019). Ethical concerns such as data privacy, responsible targeting, and the avoidance of manipulative practices are gaining prominence, particularly in light of rising public concern over data exploitation in digital advertising. The future of digital advertising will likely see a more integrated approach to ethics and sustainability, with brands adopting eco-friendly strategies and ensuring that their digital advertising efforts align with broader social values.

CONCLUSION

The evolving landscape of digital advertising has profoundly transformed consumer behavior, offering businesses new ways to engage, personalize, and influence purchasing decisions. The integration of AI, big data, and immersive technologies such as AR and VR has enhanced ad targeting and user experience, while social media and influencer marketing continue to shape brand perceptions. However, these advancements also bring ethical challenges, including data privacy concerns, ad fatigue, and consumer trust issues. As digital advertising continues to evolve, businesses must strike a balance between innovation and ethical responsibility, ensuring transparency, consumer autonomy, and meaningful engagement. By adopting data-driven yet consumer-centric strategies, brands can foster long-term trust and loyalty in an increasingly digital marketplace.

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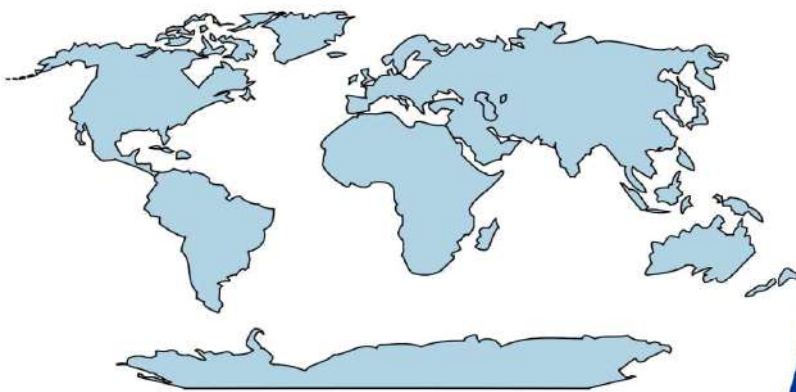
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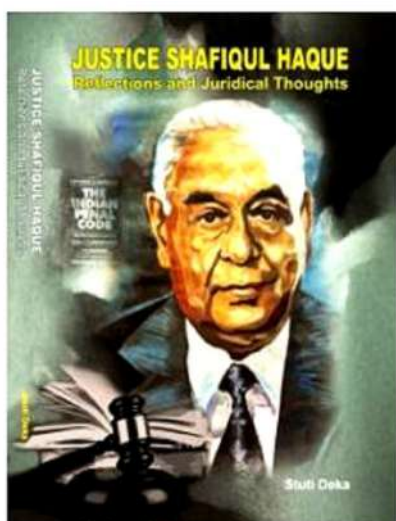


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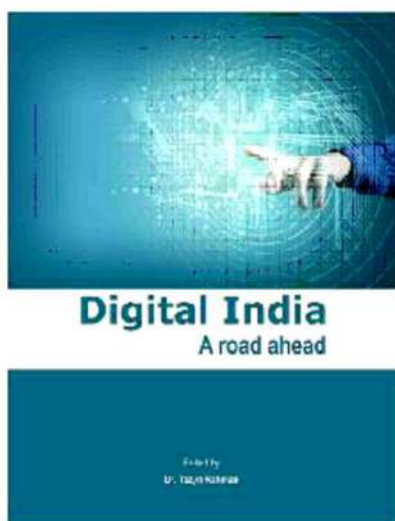
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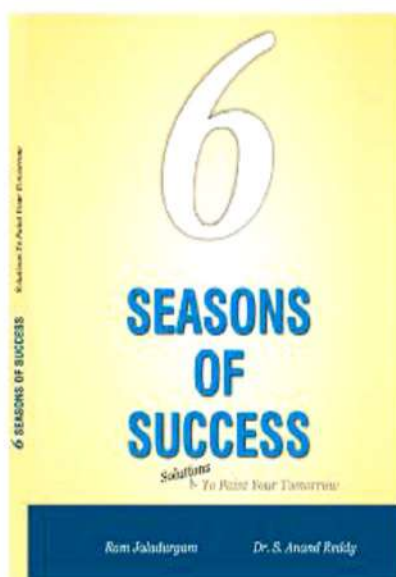
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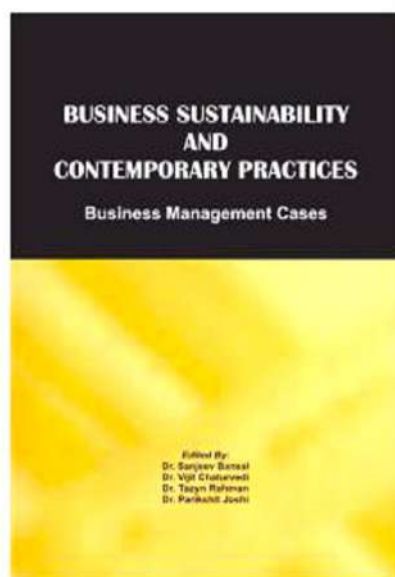
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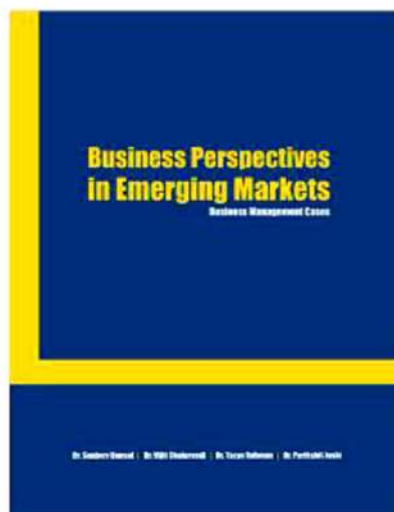
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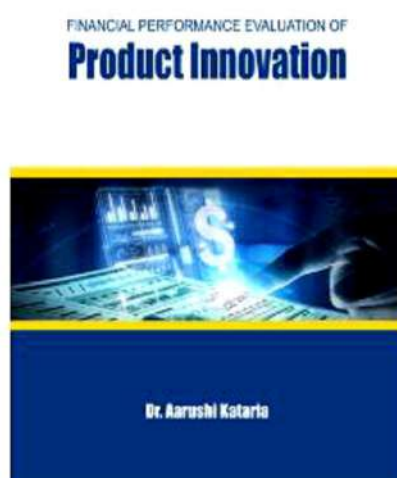
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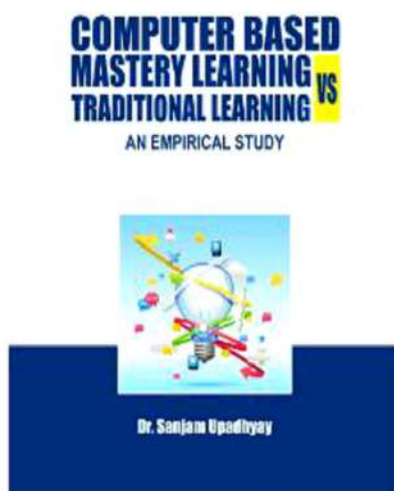
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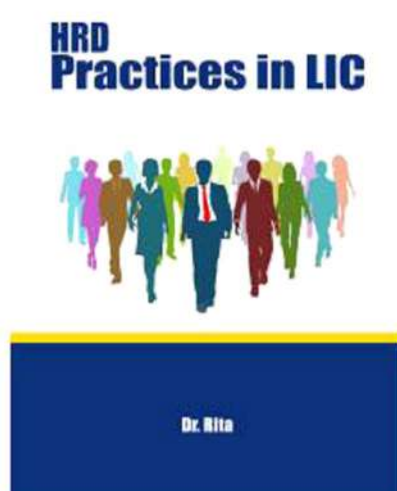
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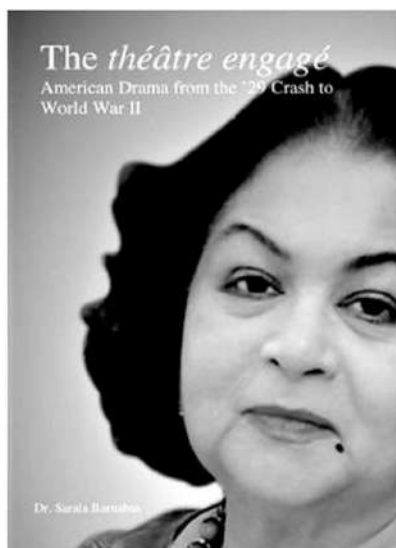
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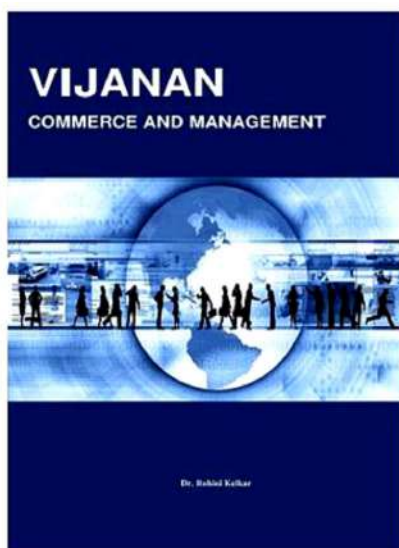


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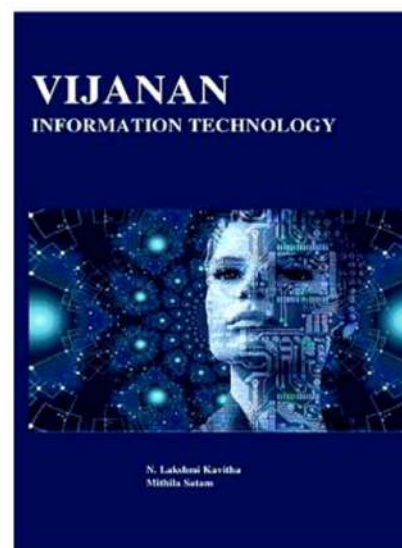
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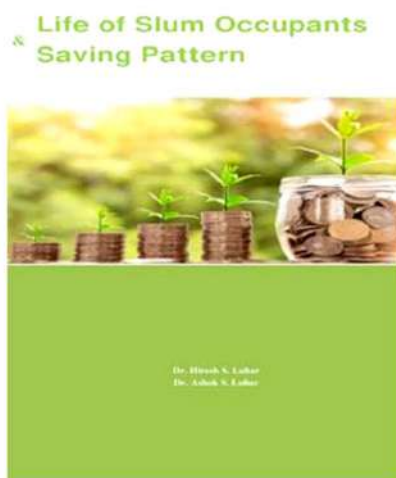
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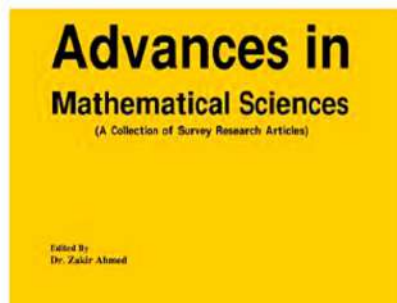
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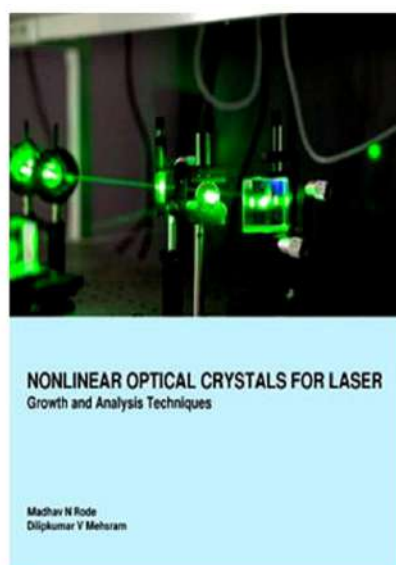


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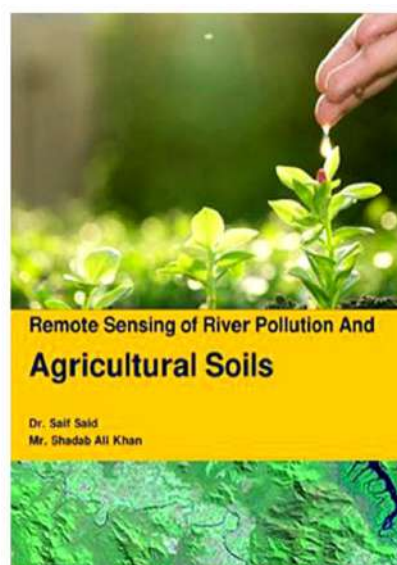
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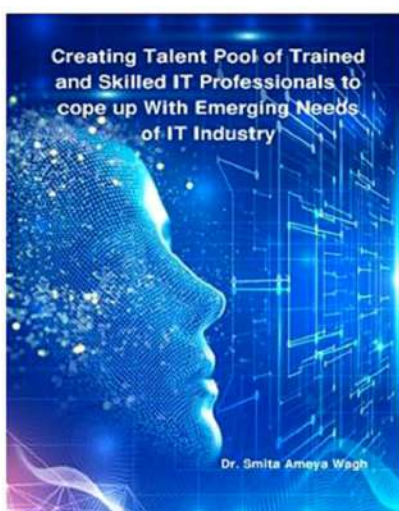
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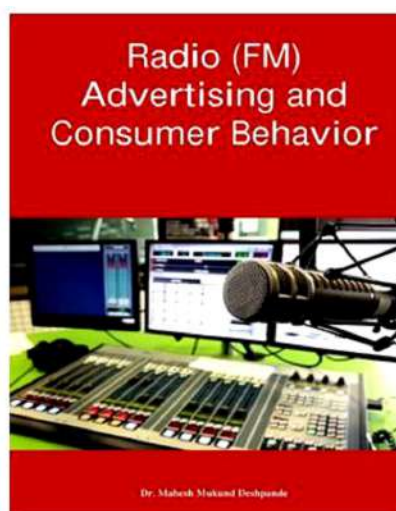
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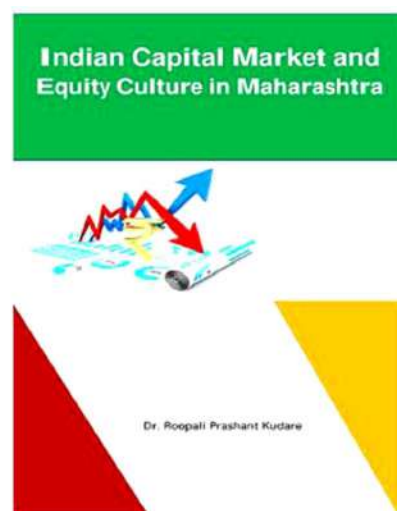
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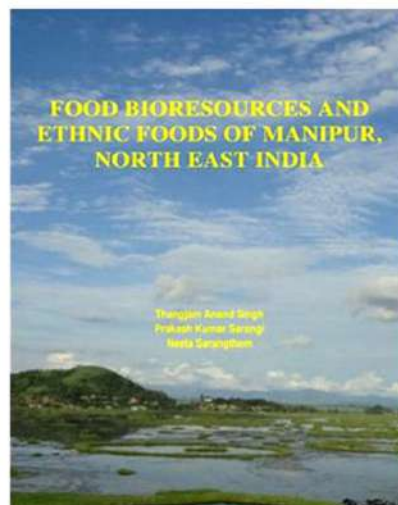
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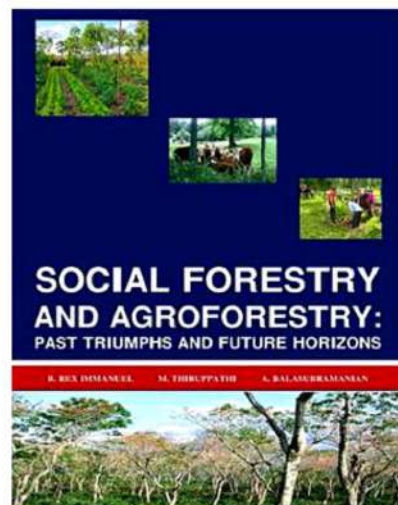
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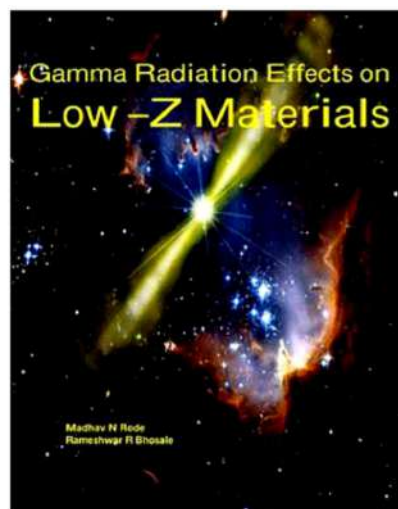
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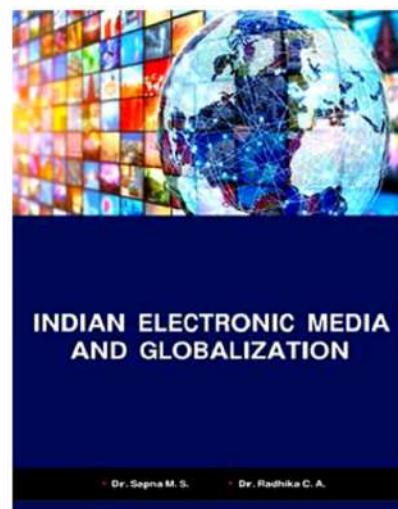
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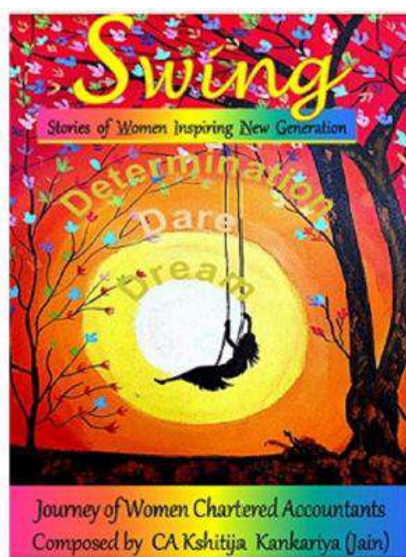
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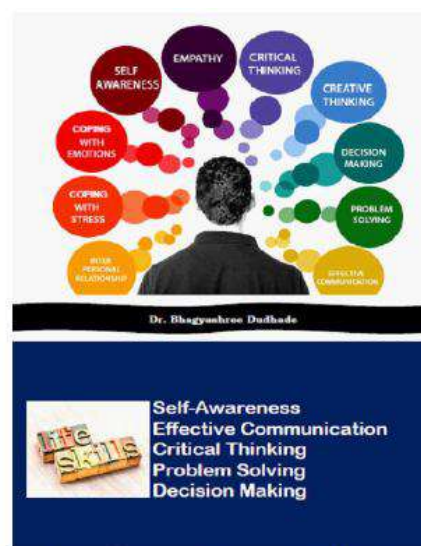
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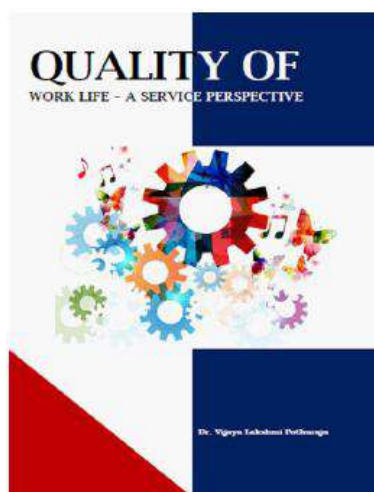


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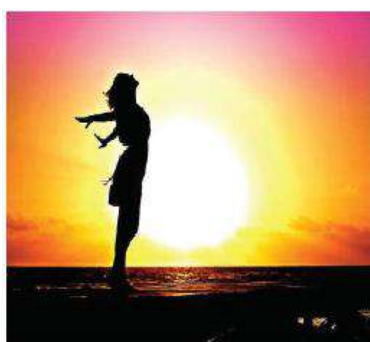
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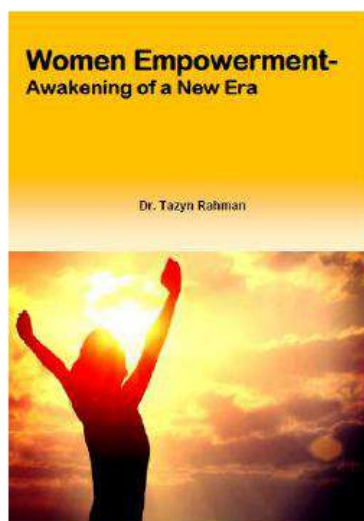


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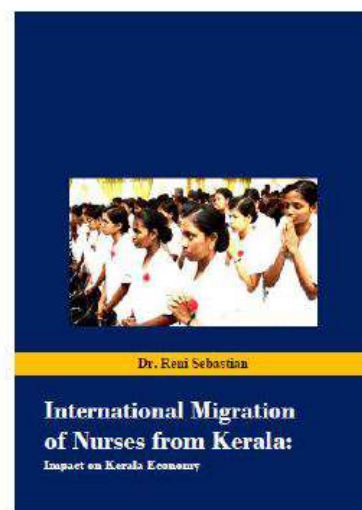


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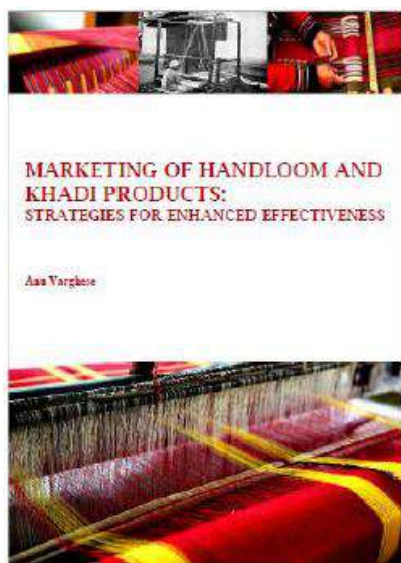
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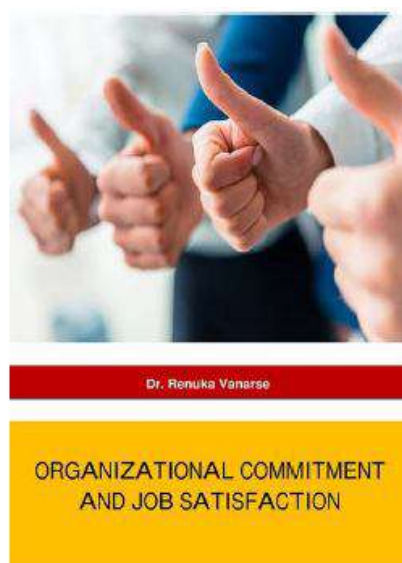
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