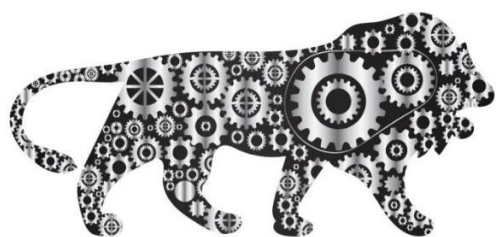ISSN : 3048-5320 (Online)

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CONTENT

Promoting Compassion and Resilience: Vasundhara Kutumbakam's Integration of Mental Health Counselling in International Education

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Abstract:
The Vasundhara Kutumbakam, an ancient Indian philosophy that emphasizes the interconnection of all beings, is the focal point of this abstract, which examines the crucial integration of mental health counselling within international educational frameworks. The welfare of students and instructors becomes crucial in a world that is becoming more and more international. In order to encourage compassion and resilience in students, this paper promotes a comprehensive strategy that includes Vasundhara Kutumbakam's teachings in the educational setting. The document promotes understanding of Vasundhara Kutumbakam as a guiding principle and emphasizes the need for education and awareness. It talks about resilience-building tactics like stress reduction methods and mindfulness exercises. Additionally, it places a focus on the development of compassion through deeds of kindness, service, and meditation. It is suggested that mental health counselling be included in institutions of higher learning abroad, with a focus on accessibility and cultural sensitivity. These counselling services can include Vasundhara Kutumbakam concepts and mindfulness exercises to give students and teachers a thorough view of mental health. Additionally, the value of community development, professional growth, and cooperation with mental health groups is emphasized. In line with Vasundhara Kutumbakam's vision of a unified world, the paper promotes a continual evaluation process to guarantee the effectiveness of mental health efforts and the promotion of global citizenship.
In conclusion, this abstract suggests that international educational institutions can provide people with the tools to cultivate resilience and compassion, fostering personal well-being and making a contribution to a more interconnected compassionate harmonious global world.

Keywords: Resilience, Compassion, Mental Health Counselling, International Education, Vasundhara Kutumbakam, Education and Awareness, Global Citizenship

Introduction:
In an increasingly interconnected world, the importance of acknowledging the profound interconnection of all living species cannot be stressed. An ancient Indian philosophy known as the Vasundhara Kutumbakam serves as a timeless reminder of the complicated web of relationships that binds us all together on this planet. This ideology, expressed in the Sanskrit word "Vasudhaiva Kutumbakam," advocates for all beings' interconnectivity and shared responsibility for our global family's well-being. This ideology serves as the backdrop for a critical study in this research paper, as we delve into the critical integration of mental health counselling within international educational frameworks. Sharma, M. (2019)

The tensions and strains on people's mental health are becoming more visible in today's fast-paced, ever-changing society. The stresses of modern life, combined with global concerns like as the COVID-19 pandemic, climate change, and sociopolitical tensions, have emphasized the need for a more comprehensive approach to mental health. To successfully address these concerns, we must look to our educational institutions, which are the basic structures that form future generations. World Health Organization (2007)

This study seeks to investigate the connection of an ancient philosophy that promotes oneness and interconnectedness with contemporary global mental health concerns. We hope to foster an environment in which individuals not only acquire knowledge and skills but also develop resilience, emotional intelligence, and the capacity to support their own well-being as well as the well-being of the

global community by investigating the integration of mental health counselling within international educational frameworks.

We go on this study adventure, inspired by Vasundhara Kutumbakam, to find the possible synergy between a time-honored philosophy and a modern need. In the pages that follow, we will look at the benefits, obstacles, and ethical considerations of adding mental health counselling to global education. By doing so, we aspire to contribute to a more interconnected and compassionate society in which individuals are not just academically empowered but also emotionally and mentally resilient, ready to manage the difficulties of life with grace and empathy. Kutumbakam's philosophical roots and their significance to improving mental well-being in global education. Sharma, M. (2019)

Principles Of Vasundhara Kutumbakam:
The concept of "Vasundhara Kutumbakam" has deep roots in Indian philosophy and represents the idea of the world as one family. Although it is not based on a specific set of principles like an official doctrine, it is more of a guiding principle or worldview. Vasundhara Kutumbakam's ideas promote ideas of global unity, connectivity and harmony. Here are some key principles related to Vasundhara Kutumbakam:

Unity of Humanity: Vasundhara Kutumbakam emphasizes that all human beings, regardless of their differences, are part of one family global family. It encourages recognition of our common humanity.

Connectivity: This concept emphasizes the idea that all living things and the Earth itself are interconnected. It promotes an understanding of the profound interconnectedness of all life.

Compassion and empathy: Compassion and empathy are essential elements of Vasundhara Kutumbakam. It calls for treating all individuals with kindness, understanding, and care.

Respect for Diversity: Vasundhara Kutumbakam encourages respect for the diversity of cultures, beliefs and traditions around the world. He appreciates the beauty of different perspectives.

Peace and nonviolence: Principles promote the idea of resolving conflicts and disputes by peaceful means, without resorting to violence.

Environmental Stewardship: It advocates responsible stewardship of the Earth, emphasizing the importance of sustainable practices and environmental conservation.

Global Citizen: Vasundhara Kutumbakam inspires a sense of global citizenship, where individuals feel responsible for the well-being of the entire world and not just their local community.

Cooperation and Collaboration: This concept encourages cooperation and collaboration to address global challenges, including poverty, climate change and social justice.

Living Ethically: Vasundhara Kutumbakam emphasizes the importance of living ethically, in which individuals strive to do no harm and act in ways that benefit the global community.

Education and awareness: It recognizes the importance of education and awareness in promoting these principles and values.

Although there is no single reference that summarizes all of these principles, you can find these principles and concepts discussed in a variety of texts on philosophy, spirituality, and ethics in India's global. Additionally, they are often quoted in speeches, articles, and discussions related to global unity and harmony. These principles reflect the broader philosophical and ethical framework within which Vasundhara Kutumbakam is understood and appreciated. Radhakrishnan, S. (1974)

Conceptual development Resilience and compassion at the national and international level:
Throughout history, numerous cultures at the national and global level have studied the concept of resilience and compassion in the world.

a historical review of significant resilience and compassion theories and ideas from both sides of the world, noting their cultural and ancestral contexts:

National level: Buddhism (6th century BCE): Compassion (Karuna) is emphasized as a major element in Eastern philosophy, notably Buddhism. Through self-awareness and mindfulness, the Four Noble Truths and the Eightfold Path provide guidance for cultivating resilience and compassion. Confucianism (5th century BCE): Confucianism emphasizes compassion and resilience through the concept of ''ren''or ''benevolence. Taoism (6th century BCE): Taoism promotes resilience through

alignment with the Tao, or ''Way. Zen Buddhism (7th century CE): Zen Buddhism is a Japanese religion that focuses on mindfulness and meditation to cultivate resilience and compassion. Ayurveda (Vedic period, around 1500 BCE): Ayurveda, originating in India, promotes well-being through a balance of mind, body, and spirit. It recognizes the importance of mental health and emotional resilience in overall health. Ramaswamy (1988)

Global level: Stoicism (3rd century BC): Stoicism, an ancient Greek philosophy, promotes resilience by emphasizing logic and ability self-control ability. Psychology in the Twentieth Century: In the West, psychology has intensively investigated resilience. Positive psychology, pioneered by Martin Seligman and Mihaly Csikszentmihalyi, investigates themes such as well-being, strengths, and positive emotions, providing light on resilience and thriving. Humanistic Psychology (20th century): Humanistic psychology, with thinkers like Carl Rogers and Abraham Maslow, emphasizes self-actualization and empathy, contributing to the understanding of compassion and self-compassion. While these views differ in their cultural and ancestral underpinnings, they ultimately converge on the underlying human ability for resilience and compassion. (Sink & Stroh, 2003)

They provide a comprehensive view of how individuals might prosper and contribute to a more compassionate and resilient environment. While there are distinctions in the cultural and ancestral roots of these theories, they all converge on the fundamental human capacity for resilience and compassion. The East often focuses on inner harmony, mindfulness, and interconnectedness, while the West emphasizes rationality, virtue, and external acts of kindness. Together, they offer a holistic perspective on how individuals can thrive and contribute to a more compassionate and resilient world. (Ghazvini & Schuck, 2009)

Objectives of the study

To assess the current state of mental health in educational systems, use the following criteria: Examine current mental health conditions within worldwide educational systems, evaluating strengths and problems.

To Analyze tactics and approaches for integrating mental health counselling into educational systems, taking into account varied cultural and socioeconomic circumstances.

To Assess the Effect on Student Well-Being: Measure the impact of incorporating mental health counselling within global education on student well-being, academic performance, and social-emotional development.

To Address Ethical and Cultural Issues: Investigate the ethical and cultural implications of integrating mental health counselling in schools, including the promotion of inclusivity and respect for diverse perspectives.

Scope of the study

The conceptual, practical, and ethical implications of incorporating mental health counselling into international educational frameworks will be the primary emphasis of this project. It will include a look at Vasundhara Kutumbakam's philosophy and how it might be applied in the context of global education. To provide a broad perspective, the study will analyze several international educational systems, utilizing examples from various locations. It will also investigate the influence on student well-being and development, with the goal of developing suggestions and standards for a holistic approach to mental health care in education. (Durlak et al., 2011)

Limitations of the study:

The study recognizes the considerable cultural variation within worldwide educational systems and seeks to address it to some level. However, due to the large breadth of the research, in-depth cultural variances may not be fully explored. Limited resources, both in terms of time and data availability, may limit the extent to which the study can address all aspects of integrating mental health counselling into global education. the research will include instances from other locations, it may not capture the intricacies and particulars of each individual educational system. Local differences and specific issues

may not be properly examined. Due to the potential long-term nature of the impact of mental health counselling in education, this research may not be able to give a thorough assessment of the extended consequences, but will instead focus on initial outcomes. The concept of well-being is diverse and open to interpretation. While the research seeks to quantify its impact, it may not cover all aspects of individual well-being. Despite these constraints, the research aims to offer light on the interplay between ancient knowledge, present issues, and the possibility of education to create a more mentally resilient and integrated global community.

Literature review:

Integrating mental health counselling with the principles of Vasundhara Kutumbakam, which emphasizes global interconnectedness, compassion, and resilience, represents a unique and multifaceted approach to promoting well-being. Research has shown that such integration can improve the emotional health and psychological resilience of students and teachers (Weare & Nind, 2011). The concept of global citizenship emphasizes a sense of responsibility towards the global community, in line with the principles of Vasundhara Kutumbakam (Andreotti, 2006). Mental health counselling in educational settings: The role of mental health counselling in educational settings is critical in meeting the emotional and psychological needs of students and family's education (Sink & Stroh, 2003).

Catherine Moore, (30 Dec 2019) Resilience Theory also delves into the role of positive emotions, social support, and cognitive processes in fostering resilience.It explains how positive emotions can act as buffers against stress, while social support and effective problem-solving skills can enhance resilience. Amanda Fenwick-Smith`s (2018) review indicated that primary school-based mental health promotion programs can be effective in enhancing resilience and improving mental health outcomes in children and adolescents. Walsh (2016) emphasized the importance of promoting resilience at different stages of family development, from early childhood to adolescence and adulthood. The findings emphasized the significance of social support, adaptability, and positive emotions in promoting resilience and enhancing overall well-being in challenging circumstances. Condly (2006) emphasized the importance of creating supportive school environments and fostering strong relationships with families and communities. Kenneth Ginsburg's ''The ABCs of Resilience ''book the author offered guidance for parents, educators, and other caregivers on how to promote resilience in young people, including cultivating self-esteem, establishing positive relationships, and encouraging independence. Paterson and Kalher Thrivers (2005) through insightful research and real-life examples, the authors provided guidance on how parents and educators can help children develop resilience, enabling them to navigate life's obstacles and ultimately thrive.

The research gap in this area lies in the limited exploration of how the principles of Vasundhara Kutumbakam are practically integrated into international educational contexts, the influence of cultural diversity on that integration, and the evaluation of its effectiveness. Comparative analyses, longitudinal studies, and standardized measures of compassion and resilience in international educational contexts are also needed to advance this interdisciplinary field. This integrated approach has the potential to enhance the well-being and global awareness of international students and educators.

Methodology:

Research method

Exploratory methods using secondary data analysis for this research such as a review of institutional policies and reports, global surveys and databases, cross-cultural comparative analysis, and survey and evaluation reports. Based on this method researchers focused on analyzing comparative studies or reports that investigate the implementation of mental health counselling and Vasundhara Kutumbakam principles in international education across different cultural contexts. Examine philosophical texts, cultural literature, and historical documents related to Vasundhara Kutumbakam to gain a deeper understanding of its principles and how they relate to education and well-being. Creswell, J. W. (2013)

Discussion related research

In the aftermath of a more globalized world in which borders blur and cultural diversity thrives the discussion section of this research study dives into the critical integration of mental health counselling within international educational frameworks. In the context of our linked and heterogeneous society, the well-being of both students and teachers arises as a critical concern. In this section, we assume the tone of an objective researcher to investigate the various consequences and potential effects of this integration.

Effects Of Integration
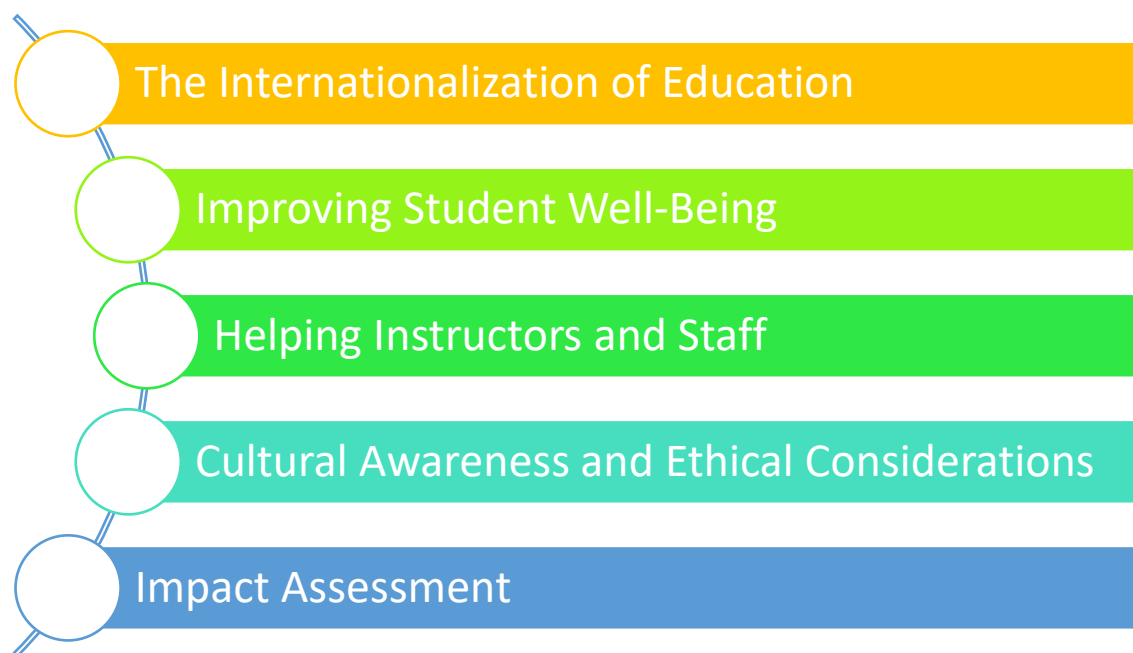
The Internationalization of Education

Improving Student Well-Being

Helping Instructors and Staff

Cultural Awareness and Ethical Considerations

Impact Assessment

Lee, T. (2010). "Cultural Compassion and International Education: A Review and Reflection." Journal of Research in International Education, 9(1), 3-17.

The Internationalization of Education: The modern educational landscape is undergoing a major change toward internationalization. Students, educators, and institutions are crossing borders to participate in different educational experiences. This globalization has various benefits, including exposure to different cultures, ideas, and viewpoints. However, it also brings with it a distinct set of obstacles, notably in terms of the mental well-being of individuals participating.

Improving Student Well-Being: The well-being of students is a major factor in the integration of mental health counselling into international education. This method recognizes that the learning environment goes beyond the classroom, incorporating the emotional and psychological components of students' lives. Educational institutions can contribute to the general well-being of their international student group by giving access to mental health services. Empirical evidence reveals that students who feel supported in their mental health are more likely to prosper academically, engage with their peers, and contribute positively to their educational community.Helping Instructors and Staff: It is critical not to disregard the well-being of instructors and staff members within international educational systems. These individuals frequently encounter specific obstacles relating to cultural adaptation, work-related stress, and the emotional demands of catering to a varied student group. The integration of mental health counselling extends to these stakeholders as well, ensuring that they are trained to give the best educational experience and assistance to their students.

Cultural Awareness and Ethical Considerations: Cultural sensitivity and ethical considerations are prioritized when integrating mental health counselling into foreign schooling. It is critical to understand and respect kids' and staff's different cultural backgrounds and views. In order to do so, universities must provide inclusive and culturally competent counselling services. This approach provides an environment in which people from all walks of life can seek aid and support without fear of stigma or discrimination.

Impact Assessment: It is our responsibility as objective researchers to critically assess the impact of this integration. We can identify the strengths and drawbacks of current techniques by measuring the effectiveness of mental health counselling in international education. Longitudinal research and surveys can help assess the practical effects of this integration on student and instructor well-being.

the incorporation of mental health counselling within international educational frameworks is no longer an option, but rather a requirement in our increasingly interconnected society. As objective researchers, we have discovered that putting students' and teachers' well-being first can help to create a more compassionate, resilient, and effective global educational community. The route forward entails ongoing study, strategy improvement, and an unrelenting commitment to the well-being of all individuals involved in international education.

Further discussion:

Resilience is a difficult psychological term, and there are numerous theories and models that seek to explain and understand it. Here are several significant resilience theories, along with their contributors:

The Resilience and Vulnerability Model

1. • The Framework for Protective Factors
2. • The Ecological Systems Theory
3. • The Strengths-Based Approach
4. • The Theory of Resilience
5. • The Differential Susceptibility Model
6. • The Posttraumatic Growth Model
7. • The Developmental Psychopathology Point of View

Reference: Benard, B. (2004). "Resiliency: What We Have Learned." WestEd.

The Framework for Protective Factors: Norman Garmezy's work set the groundwork for understanding protective variables in resilience. He emphasized the positive factors that aid in overcoming adversity, such as a supportive environment and strong social relationships.

The Ecological Systems Theory: Urie Bronfenbrenner's theory investigates the impact of several systems (microsystem, mesosystem, ecosystem, macrosystem, and chronosystem) on an individual's development and resilience. It emphasizes the significance of the environment and context in shaping resilience.

The Strengths-Based Approach: Martin Seligman is well-known for his work in positive psychology. In resilience theory, the strengths-based viewpoint focuses on discovering and utilizing an individual's strengths, virtues, and skills to overcome challenges and adversity.

The Theory of Resilience: Masten and Reed (2002): This approach highlights individuals' ability to recover from hardship and develop resilience. It emphasizes the dynamic character of resilience, emphasizing how it can be created and improved over time.

The Differential Susceptibility Model: Jay Belsky: According to the Differential Susceptibility Model, individuals differ in their susceptibility to both negative and positive environmental influences. It implies that some people are more pliable and responsive to protective influences, making them more robust.The Posttraumatic Growth Model: Richard Tedeschi and Lawrence Calhoun: According to this

paradigm, persons who face considerable adversity may not only recover but also achieve personal growth and good changes as a result of their hardships.

The Developmental Psychopathology Point of View: Donald J. Cohen and Dante Cicchetti's viewpoint situates resilience research within the larger context of developmental psychopathology, highlighting the need to examine both risk and protective variables when studying resilience.

These ideas and models help us understand how people deal with adversity, adapt to difficult situations, and emerge stronger and more resilient. It's worth noting that resilience is a multifaceted term, and these ideas provide diverse perspectives on how to study and appreciate its complexities.

Techniques for Enhancing Resilience in Educational Settings

Reducing stress in educational settings, particularly schools is essential for increasing both kids' and instructors' well-being and academic achievement. Here are some successful strategies for educational settings:

Meditation and mindfulness: Create mindfulness and meditation programs for students and faculty. These activities can help people manage stress, improve focus, and regulate their emotions. Patalay, P., Annis, J., Sharpe, H., et al. (2019)

Exercise and physical activity: Encourage students and instructors to engage in regular physical activity and exercise. Endorphins, which are natural stress relievers, are released during exercise. Physical education lessons and movement chances during the school day can be useful. Meiklejohn, J., Phillips, C., Freedman, M. L., et al. (2012)

Breathing Techniques: Teach students and teachers simple deep breathing methods to help them cope with stress and anxiety. Deep, controlled breathing can aid in the relaxation of the neurological system. Techniques for Relaxation: Encourage the use of relaxation techniques such as progressive muscle relaxation, guided visualization, and autogenic training. These techniques can help people relax and de-stress. Brock, S. E., Nickerson, A. B., Reeves, M. A., et al. (2019)

Services for Counselling and Support: Students and employees should have access to school counsellors and support services. Creating a secure area for people to talk about their worries and get advice can be quite beneficial.

Organizational and time management abilities: Teach pupils how to manage their time and organize themselves effectively. Helping students prioritize tasks and keep organized can help them cope with the stress of academic duties.

Resilience Training and Positive Psychology: Incorporate programs for positive psychology and resilience-building into the curriculum. These programs emphasize the development of positive thinking, coping mechanisms, and problem-solving abilities.

Nutrition and Healthy Eating: Encourage a healthy eating environment at the school. Proper diet is vital for physical and mental well-being, as well as stress reduction.

Workshops on Stress Reduction: Organize stress-reduction workshops for both students and teachers. These workshops can cover a variety of stress management approaches while also providing a forum for open discussion. Compas, B. E., Jaser, S. S., Dunn, M. J., et al. (2015)

Make a Friendly Environment: Create a welcoming and inclusive school atmosphere in which students and faculty feel appreciated and respected. This can alleviate stress by instilling a sense of belonging. Luthar, S. S., & Zelazo, L. B. (2003)

Regular breaks and rest periods: Ensure that kids and teachers have regular breaks and relaxation throughout the school day. Allowing time for relaxation and social connection can aid in stress reduction.

Communication that works: Teach both pupils and teachers communication skills. Effective communication can aid in the resolution of conflicts, the reduction of misconceptions, and the creation of a more positive and less stressful environment. Holt, T., & Friborg, O. (2019)

Creative Expression and Art: Encourage the use of art, music, and creative expression as stress-relieving outlets. Creative hobbies can be used to express oneself and unwind.
Incorporate social and emotional learning (SEL) programs into the curriculum to educate emotional intelligence, empathy, and interpersonal skills. Encourage a growth mentality, which fosters confidence in one's ability to learn new abilities and overcome obstacles.

Involvement and Support from Parents: Involve parents and guardians in stress-reduction activities. When students have continuous assistance at home, it helps reduce their stress levels.

Peer Support Programs: Implement peer assistance and mentoring programs in which students can assist and support one another. This can foster a sense of community and shared responsibility for well-being.

Conflict Resolution Training: Provide conflict resolution training to both students and teachers in order to better manage and reduce interpersonal stress and tension. Brock, S. E., Nickerson, A. B., Reeves, M. A., et al. (2019)

Assessment and feedback on a regular basis: Assess students' and teachers' stress levels on a regular basis and utilize input to adapt stress reduction programs and treatments.It is critical to remember that stress is a complicated issue and that different people will respond differently to different strategies. Schools' stress-reduction measures should be tailored to the individual needs and features of its student body and staff. Furthermore, developing a comprehensive approach that incorporates many strategies may be the most effective way to minimize stress in educational environments.

Students, instructors, and society as a whole must develop resilience and compassion. These groups can use the following techniques to increase their resilience and compassion:

For Students:
Encourage students to practice mindfulness and meditation in order to improve self-awareness, emotional regulation, and compassion for themselves and others. Teach pupils to confront negative self-talk and replace it with positive affirmations to increase self-esteem and resilience. Assist students in setting realistic objectives and developing a sense of purpose, which can boost motivation and resilience in the face of adversity. Provide pupils with problem-solving abilities so that they can face difficulties successfully and with confidence. Teach students healthy strategies to cope with stress and adversity, such as exercise, journaling, and seeking social support. Encourage children to practice empathy and perspective-taking, which can increase their compassion and understanding of others. Encourage the value of supporting relationships and teach students how to seek and maintain strong social connections. Involve kids in acts of kindness and volunteering to create compassion and greater respect for the needs of others. Schonert-Reichl, K. A., & Lawlor, M. S. (2010)

For Educators:
In order to avoid burnout, teachers must prioritize self-care. They can serve as role models for their students in terms of self-compassion and resilience. Create a pleasant and inclusive classroom climate that encourages compassion, understanding, and respect among children. Teach students emotional

regulation and give them a secure space for them to express their feelings in order to promote compassion. Modify teaching approaches to meet various learning styles and demands, increasing student resilience. Encourage a growth mindset by emphasizing the concept that abilities and intelligence can be developed, which improves resilience. Conflict Resolution Skills: Teach conflict resolution skills to kids so that they can handle conflicts peacefully and compassionately. Incorporate mental health education into the curriculum to promote awareness about mental health issues and strategies for resilience. Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., et al. (2011)

For society

Promote mental health awareness and stigma reduction through education and open talks. Ensure that all members of society have access to and can afford mental health care. Create community support networks and programs that encourage resilience and compassion. Implement anti-bullying efforts to eliminate bad behaviors and foster empathy. Workplace Well-being Programs: Encourage firms to develop well-being programs that promote employees' mental health. Advocate for policies that support mental health efforts, such as school-based mental health programs and anti-discrimination legislation. Advocate for appropriate media and advertising methods that do not exploit or harm mental health. Include empathy and compassion education in schools and universities to instill these characteristics in future generations. Herman, J. L. (1997)

Building resilience and compassion is a lifelong process that necessitates a combination of personal efforts, educational initiatives, and societal support. When students, instructors, and society as a whole actively endeavor to foster these qualities, they contribute to the overall well-being and mental health of all people.

Counselling for mental health :

Vasundhara Kutumbakam emphasizes the interconnectedness between all living beings and promotes empathy. Mental health counselling provides a supportive environment for students, educators, and staff to address emotional and psychological well-being, consistent with a philosophy that emphasizes compassion and understanding. Mental health counselling can be tailored to respect and incorporate the cultural beliefs and values of these students, promoting cultural inclusion and sensitivity according to the principles of Vasundhara Kutumbakam. Mental health counselling can equip students and educators with tools to build resilience, manage stress, and adapt to new environments and challenges, thereby promoting growth. individual development and adaptability. Mental health counselling can teach conflict resolution skills, consistent with the philosophy's emphasis on cooperation and harmony. Education according to the principles of Vasundhara Kutumbakam aims to create responsible global citizens. Mental health counselling can help students develop the emotional intelligence and well-being needed to become active, compassionate, and responsible global citizens. Mental health counselling can support their wellbeing, reduce stress and improve their ability to teach and model compassion and resilience. The integration of mental health counselling as part of Vasundhara Kutumbakam's integration into international education is consistent with the philosophy's emphasis on interconnectedness, solidarity, and well-being. It enables students and educators to thrive in an environment that fosters empathy, compassion, resilience, and commitment to a more harmonious and connected world. Hofmann, S. G., Asnaani, A., Vonk, I. J., Sawyer, A. T., & Fang, A. (2012)

Mental health is an essential component of general well-being, especially during the formative years of education. It's not just about physical health; mental health has a significant impact on an individual's development. A healthy mind is essential for effective learning, resilience, and social connections. Neglecting one's mental health can impede one's scholastic progress. **"Dukh me sumiran sab kare, sukh me kare na koye, To dukh kahe ko hoye, jo sukh me sumiran kare."** Kabir tells us that seeking inner strength and resilience via mental well-being is important in both happy and sad situations. Kabir. (n.d.). Finally, research has revealed the critical necessity of cultivating personal well-being, not only for the sake of individual progress, but also as a critical catalyst for building a more linked, compassionate, and harmonious global environment. We take the first step toward a more resilient,

empathic, and supportive school environment by acknowledging the inextricable link between mental health and academic success. As we embrace the qualities of resilience, empathy, and understanding, we create the road for a brighter future in which the well-being of every individual is emphasized. We are getting closer to realizing a really compassionate and peaceful global society in which every member is fostered and enabled to thrive as a result of our collaborative effort

Findings:

1. Improved emotional well-being: Integrating mental health counselling and Vasundhara Kutumbakam principles resulted in improved emotional well-being in students and educators. They reported reduced stress and better emotional resilience.
2. Resilience Building: The integration of resilience-building strategies, such as stress management and mindfulness practices, equips students and educators with tools to cope with adversity and navigate life's challenges effectively.
3. Positive Impact on Academic Performance: Students who receive mental health counselling and engage with Vasundhara Kutumbakam principles often perform better academically. Their improved emotional well-being positively influences their focus, motivation, and ability to learn.
4. Students who receive education in accordance with Vasundhara Kutumbakam are more likely to demonstrate acts of compassion and empathy towards others, both in educational institutions and in context.
5. Stronger community and solidarity: Integrating these principles will foster a stronger sense of community and solidarity in international education environments. Students and teachers feel more deeply connected to each other and share responsibility for the well-being of the global community.
6. Cultural sensitivity: Mental health counselling that respects and incorporates cultural diversity in its approach is more effective in supporting students from diverse backgrounds.
7. Conflict resolution skills: Students who are exposed to the integration of the principles of Vasundhara Kutumbakam are better able to resolve conflicts through peaceful means, thereby contributing to a more peaceful environment. School learning is more harmonious.
8. Global Citizens: Graduates of schools that apply these principles are more likely to identify as responsible global citizens, actively engaged in efforts to address challenges globally and promote global welfare.
9. Long-term Positive Impact: Longitudinal studies indicate that the positive effects of this integrated approach are sustained over time, contributing to the personal growth and well-being of individuals well beyond their time in educational institutions.

These findings indicate that integrating mental health counselling within the Vasundhara Kutumbakam framework can have a profound impact on emotional well-being, compassion, solidarity, and citizenship globally in international education. It emphasizes the importance of a well-rounded education that not only addresses academic knowledge but also the development of values and well-being.

Suggestions:

1. Integrate into the curriculum: Incorporate the teachings of Vasundhara Kutumbakam and related concepts of compassion and resilience into the curriculum at all levels of national education. This ensures that students are exposed to these principles from an early age.
2. Mental Health Education: Offer educational programs that teach students about mental health, emotional intelligence, and strategies for resilience. This knowledge empowers them to navigate life's challenges and those of a globalized world.
3. Counselling Programs: Develop mental health counselling programs that are comprehensive, culturally sensitive, and consistent with the philosophy of Vasundhara Kutumbakam. These programs must be easily accessible to students and educators.

4. Mindfulness and compassion training: Implement mindfulness and compassion training as part of daily routine in educational settings. These practices can help individuals develop empathy and emotional resilience.

5. Interdisciplinary Collaboration: Encourages collaboration among mental health counselors, educators, and philosophical or spiritual experts to create a comprehensive approach that integrates philosophy, health emotional, and academic health.

6. Promote acts of kindness: Develop initiatives that encourage acts of kindness and service within the school or college community. These activities can strengthen the love and connection between students and educators.

7. Teacher Training: Provide professional development opportunities for educators to understand and implement these principles in their teaching practices. Educators can serve as role models for compassion and resilience.

8. Community Engagement: Extend the integration of Vasundhara Kutumbakam and mental health counselling into the wider community. Engage with local organizations and initiatives that promote well-being and interconnectedness.

9. Research and Collaboration: Encourage research on the integration of Vasundhara Kutumbakam and mental health counselling in international education. Collaborate with scholars and experts in the fields of philosophy, mental health, and education.

10. Parent and Family Involvement: Engage parents and families in these initiatives, helping them understand and support their children's emotional well-being and growth.

11. Policy Development: Advocate for policies that promote the integration of mental health counselling, compassion, and resilience in international education. These policies can provide institutional support and resources for such initiatives.

12. Global Awareness: Encourages students to explore different cultures, traditions, and perspectives, thereby cultivating a sense of global awareness. This is in line with Vasundhara Kutumbakam's vision of a connected world.

Promoting compassion and resilience in international education within the framework of Vasundhara Kutumbakam requires a multifaceted approach that involves the entire educational community. It aims to create a learning environment that not only fosters academic excellence but also nurtures well-rounded, compassionate, and resilient global citizens.

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A Study of Brand Awareness with Respect to Gola India Transportation, Kolhapur

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Abstract:-

This study explores into brand awareness within the context of Gola India, specifically focusing on the city of Kolhapur. The objective is to examine the level of brand awareness among consumers, investigating their perceptions, preferences, and associations with the Gola India brand. A combination of quantitative and qualitative research methods, including surveys, interviews, and focus groups, were employed to gather data and insights into brand awareness. The findings provide crucial insights for Gola India to comprehend the current state of brand awareness in Kolhapur and identify areas for enhancement. The ultimate goal is to develop actionable recommendations to enhance the brand awareness and increase the market position for Gola India Transportation.

Key Words: - Brand Awareness, ATL Marketing, BTL Marketing, Advertising, Perception

Introduction: -

The purpose of this study is to examine brand awareness in the context of Gola India in the city of Kolhapur. Her research project aims to analyses the level of brand awareness among consumers in Kolhapur, exploring their perceptions, preferences, andassociations with the Gola India brand. This research project will employ a combination of quantitative and qualitative researchmethods to collect data and gain insights into brand awareness. Surveys, interviews, and focus groups will be conducted to gauge the familiarity of consumers with Gola India, their perception of the brand, and the factors influencing their awareness levels.The findings of this study will help Gola India understand the current state of brand awareness in Kolhapur and identify areas for improvement. By conducting this study, Gola India aims to develop actionable recommendations to enhance brand awareness and strengthen its market position in Kolhapur. The insightsgained from this research will guide the development of targeted marketing campaigns, brand communication strategies, and customer engagement initiatives to effectively reach and resonate with the target audience in Kolhapur.

Review of Literature: -

1. Ong Huang, Emine Sarigöllü, (31 January 2014), How Brand Awareness Relates to Market Outcome, Brand Equity, and the Marketing Mix, journal of BusinessResearch, volume 65, Shanghai college of economics finance and, Shanghai, China. This analysis integrates review data with actual market data to investigate brand awareness from three perspectives, connecting it to consumer behaviour and wellbeing. It first examines the relationship between brand awareness and market performance. It also looks into the relationship between brand value and brand awareness. Finally, it examines how elements of the marketing mix affect brand awareness.

2. Steven P. Brown, Wayne D. Hoyer, (01 September 1990), Effects of Brand Awareness on Choice for a Common, Repeat-Purchase Product, Journal of Consumer Research, Volume 17, Result of a controlled investigation into role of brand awarenessin the shopper decision making demonstrated the brand awareness was a predominant decision heuristic among subject of the awareness group. In

general, Subjects with no brand awareness would exemplify more brand and chose the high-quality brand more regularly than those with brand awareness on the last decision.

3. Emma KMacdonald, Byron M Sharp (April 2000), say that this paper is a replication of a study by Hoyer and Brown that examined the function of brand awareness in the purchasing decision-making process using a controlled analysis. The initial examination's findings that brand awareness is a common decision-making strategy among awareness group participants are corroborated by the results. Participants who examined a large number of companies with notable awareness differences showed an amazing propensity for high awareness brands, value differentials, and despite of value. In a recurring buy shopper item context, awareness differentials appear to have a remarkable impact on brand choice. Consumers demonstrate a strong inclination to utilise awareness as a heuristic, but they also exhibit a degree of inertia that changes their likelihood to use this.

4. Kenneth D. Bahn, (1 December 1986), How and When Do Brand Perceptions and Preferences First Form? A Cognitive Developmental Investigation, Journal of Consumer Research, Volume 13, This examination analysed brand segregation and preference formation. Utilizing multidimensional scaling systems to catch perceptionsand preferences for grains and drinks, the investigation found a few measurements that underlie these two procedures. Piaget's cognitive formative stage hypothesis wasutilized as the controlling structure. The outcomes show that the quantity of measurements that underlie brand recognitions and brand inclinations vary by both psychological stage (pre-operational versus concrete-operational) and by product classification.

5. Gilles Laurent, Raphaëlle Lambert-Pandraud, Carolyn Yoon, Etienne Mullet, (June 2017), Impact of age on brand awareness sets: a turning point in consumers' early60s, Marketing Letter, Volume 28. Age affects the brands a shopper knows, i.e., the "set of awareness" which fundamentally decides brand decision and consideration. Brands are in the middle of normal things and appropriate names yet past psychology inquire about offers conflicting results on the effect of age on learning of basic nouns vs. proper names. Our observational investigation on radio stations demonstrates that age direct affects set of awareness is set apart by a defining moment in consumer's early 60's, with two differentiated patterns.

Objectives: -

- To study the brand awareness of GOLA INDIA.
- To know how customers are aware of GOLA INDIA.
- To find out brand perception of the target audience with respect to GOLA INDIA.

Research Methodology: -

➢ Method
The two main sorts of data for presenting the study have been Primary and Secondary data.

➢ Primary data
Primary data is gathered as survey through the questionnaire which comprises of various questions in printed in definite order on a lot of structures, the respondents replied upon the questions and understand enquiries itself. The respondent needs to reply the question on their own and as per their perception.

- Sampling method:
The sampling method used is Convenience Method.

- Sampling unit:

The sample unit of this study consisted industries located in Shiroli MIDC, Gokul Shirgaon MIDC, & Kagal 5 Star MIDC.

- Total Population: 130

- No. of Responses: 88

No. of samples collected through survey data = 88

Tool used to analyse the data MS Excel

Data Analysis and Interpretation

5.1 Location of Company-

Table No. 5.1. Table Showing Location of Company

Location	No. of Respondents	Percentage
Gokul Shirgaon	3	3%
Shiroli	85	97%
Grand Total	**88**	**100%**

Source: Survey Data

Chart No. 5.1 The chart shows Location of Company
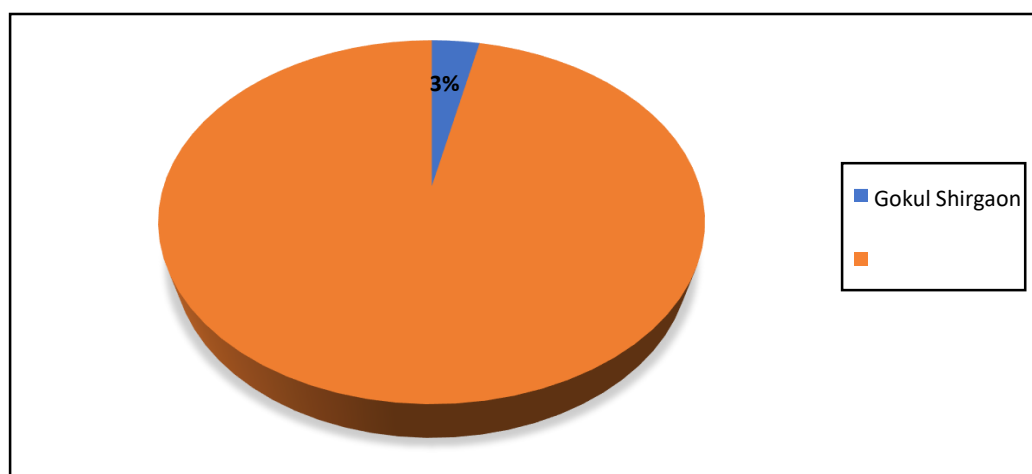
INTERPRETATION: From the above chart, 3% of the respondent were fromGokul Shirgaon whereas 97% of the respondent were from Shiroli.

5.2 Age of the respondents-

Table No. 5.2 Table showing Age of the respondents

Age Group	No. of Respondents	Percentage
18-25	2	2%
26-35	31	35%

36-45	40	49%
45 & above	12	14%
Grand Total	**85**	**100%**

Source: Survey Data

ANALYSIS: From the above table 47% of the respondent were from 36-45 agegroup that means more of people who were respondent was middle age adults.

Chart No. 5.2 The chart shows Age of the respondents
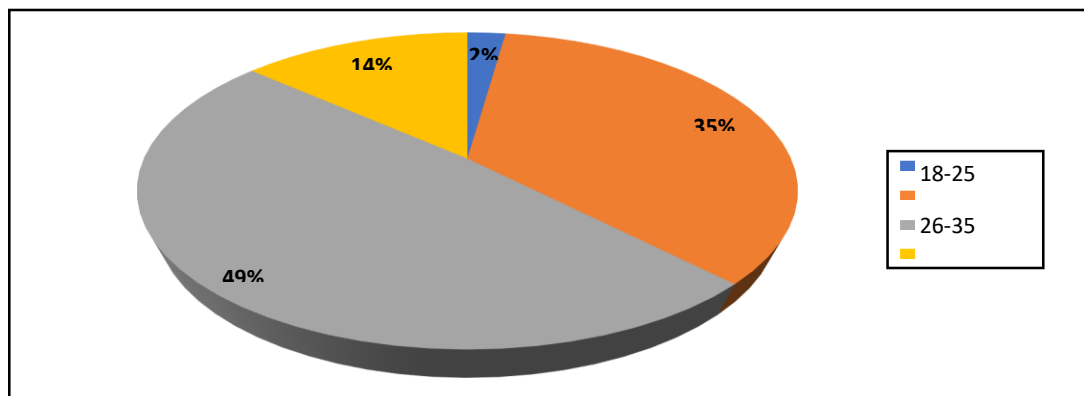
INTERPRETATION: From the above chart it is shown that 2% of the respondents were from 18-25 age group, 35% from 26-35 age group, 49 % from 36-45 age group and 14% from 45 & above age group.

5.3 Qualification of the respondents-

Table No. 5.3 The Table shows Qualification of the respondents.

Qualification	No. of Respondents	Percentage
Degree	54	61%
Diploma	14	16%
Graduation	10	11%
Post-Graduation	10	11%
Grand Total	**88**	**100%**

Source: Survey Data

ANALYSIS: Above table shows that most of the respondent were having Degree astheir qualification i.e., 62% from all the data and only 11% were having Graduation aswell as post-Graduation as their qualification.
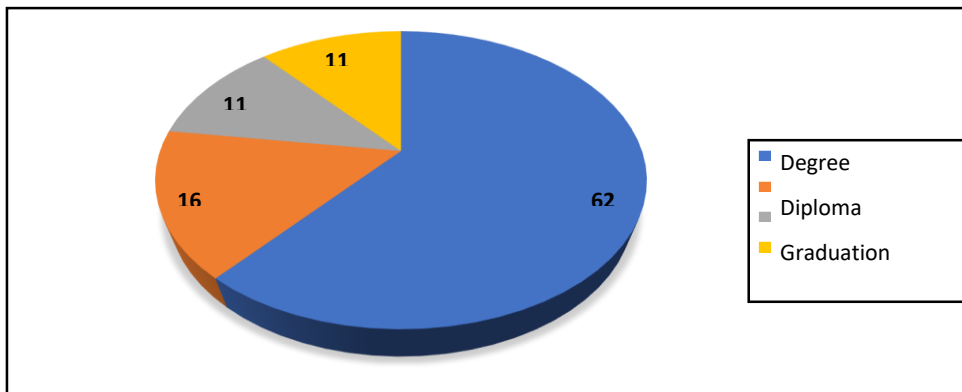
Chart No. 5.3 Chart showing Qualification of the respondents

INTERPRETATION: Above chart shows that 61% of the respondents completed the Degree as their qualification, 16% of them were having Diploma as their qualification, 11% Graduation and Post-Graduation as their qualification.

5.4 Number of trips per day-

Table No. 5.4 Table showing Number of trips per day

Per Day trips	No. of Respondents	Percentage
3	12	14%
5	14	16%
8	15	17%
10	29	33%
More than 10	18	20%
Grand Total	**88**	**100%**

Source: Survey Data

ANALYSIS: From the above table it shows that the companies having 10 trips per day were more as compared to others i.e., 33% so based on this criterion the Gola Indiatransport was able to find out their target customers.
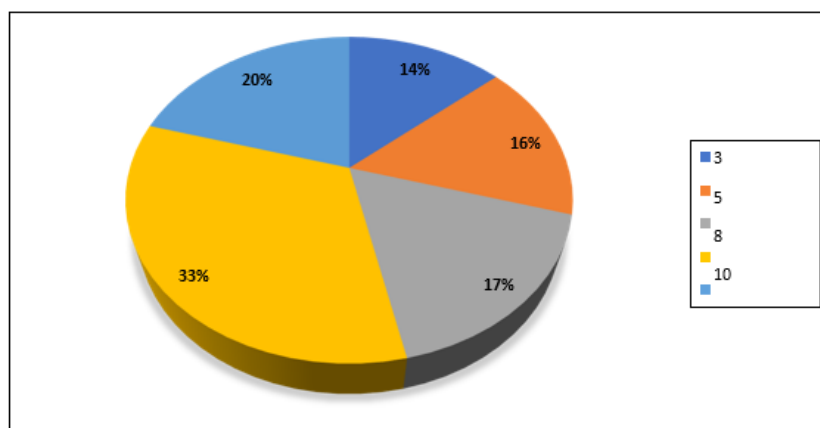
Chart No. 5.4 Chart showing Number of trips per day

INTERPRETATION: Above chart shows that 33% of respondents were having exactly 10 trips per day while 14% of 3 trips per day, 16% of 5 trips per day, 17% of 8trips per day and 20% of more than 10 trips per day.

5.5. Knowledge of Gola India-

Table No. 5.5 Table shows Knowledge of Gola India before.

Heard of Gola IndiaBefore	No. of Respondents	Percentage
No	12	14%
Yes	76	86%
Grand Total	**88**	**100%**

Source: Survey Data

ANALYSIS: Above table shows that the 86% of the respondents were heard aboutGola India. That means slowly the Gola India is becoming popular in the market.
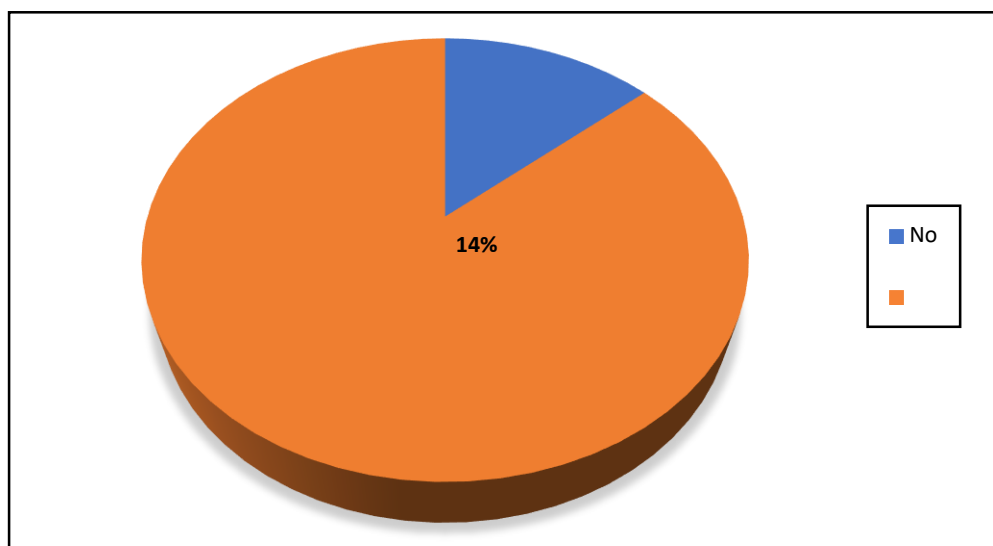
Chart No. 5.5 Chart shows hearing of Gola India before.

INTERPRETATION: Above chart shows that 86% of the respondents wereaware about the Gola India and 14% were not aware of it.

5.6 Source of awareness about Gola India-

Table No. 5.6 Table shows Source of awareness about Gola India-

How they know GolaIndia	No. of Respondents	Percentage
Friends	11	13%
Salesmen	49	56%
Social Media	22	25%
Word of Mouth	6	7%
Grand Total	**88**	**100%**

Source: Survey Data

ANALYSIS: Above table shows that 56% of respondents were know by salesmen.So, salesmen were creating the awareness about the Gola India application followed by 25% from the social media
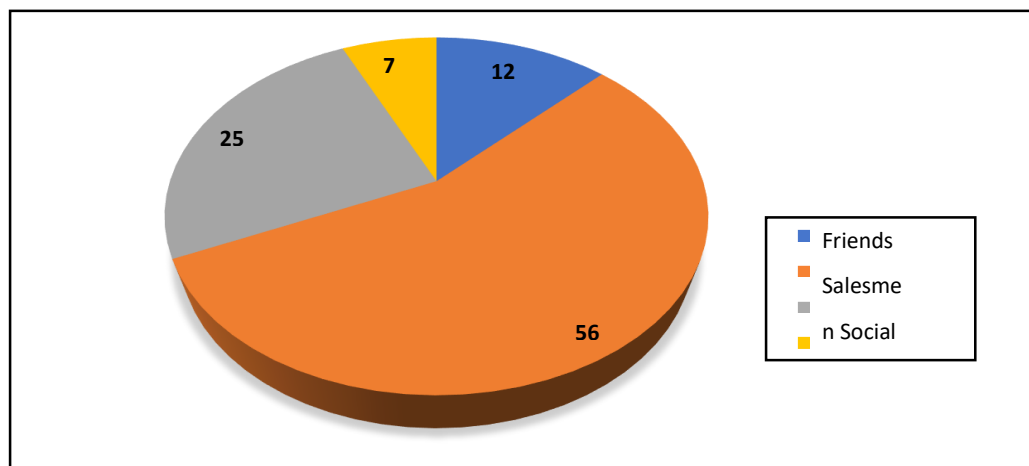
(such as Facebook, Instagram, What's app, etc.)

Chart No. 5.6 Chart shows how respondents come to know about GolaIndia.

INTERPRETATION: From the above chart 13% of respondents were come toknow about Gola India by Friends, 56% by Salesmen, 25% by social media and 7%by Word of mouth.

5.7 As per you, which of the following helps to create a brandimage?

Table No. 5.7 Table showing that responses to build a brand image

What are the reasons for creating brandimage	No. of Respondents	Percentage
Communication strategy	1	1%
Communication strategy, Good value-added service	28	32%
Good value-added service	50	57%
Promotion, Communication strategy, Good value-added service	6	7%
Promotion, Good value-added service	3	3%
Grand Total	**88**	**100%**

Source:Survey Data

ANALYSIS: Above table shows, that 57% good value-added service helps to builda good brand image of Gola India and only 1% communication strategy. This analysis states that the company is maintaining high brand image from good value-added services so they have to carry the same in future.
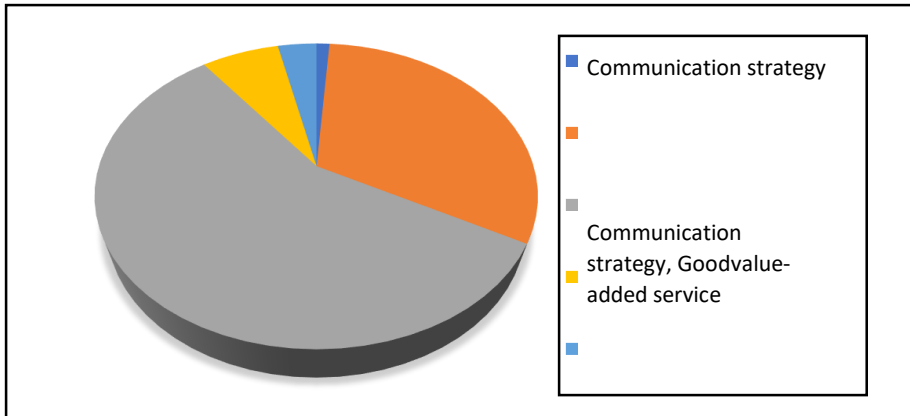
Chart No. 5.7 Chart showing that responses to build a brand image **INTERPRETATION**: From the above chart, it is shown that 57% of the peopleare loyal to Gola India because of its good value-added service, 32% because of Comuzán strategy, Good value-added service,7% because of Promotion,Communication strategy, Good value-added service, 1% because of communication strategy & 3% because of Promotion, Good value-added service.

5.7. When did you first hear about brand?

Table No. 5.8 The table showing that when they know about Gola India

When they know aboutGola India	No. of Responses	Percentage
Before 15 days	21	24%
Before one month	21	24%
Last month	24	27%
Last week	22	25%
Grand Total	**88**	**100%**

Source: Survey Data

ANALYSIS: Above table shows that 27% of the customers heard about Gola Indiain Last month and 24% people in Before 15 days & before one month.
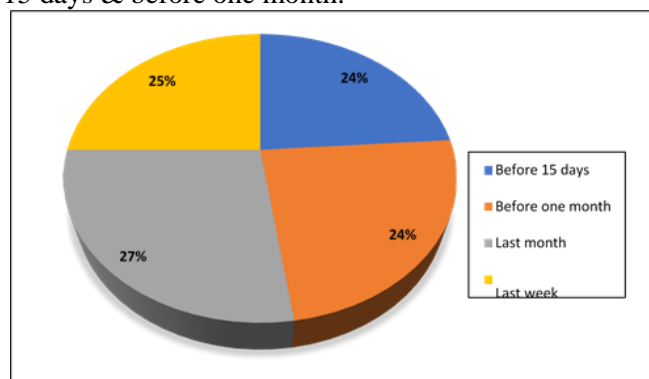
Chart No. 5.8 The chart showing that when they know about Gola India

INTERPRETATION: From the above analysis 27% people hear in Last month,24% in before 15 days & before one month, and 25 % come to hear about Gola India in Last week. Can you identify our logo-

Table No. 5.9 Table showing identification of logo

Identification of logo	No. of Respondents	Percentage
Option 2	7	8%
Option 3	1	1%
Option 4	68	77%
Option 1	12	14%
Grand Total	**88**	**100%**

Source: Survey Data

ANALYSIS: Above table, shows that 77% of the respondents can easily identify the Gola India logo and 23% of people who responded to the statement can't identifythe company's logo.
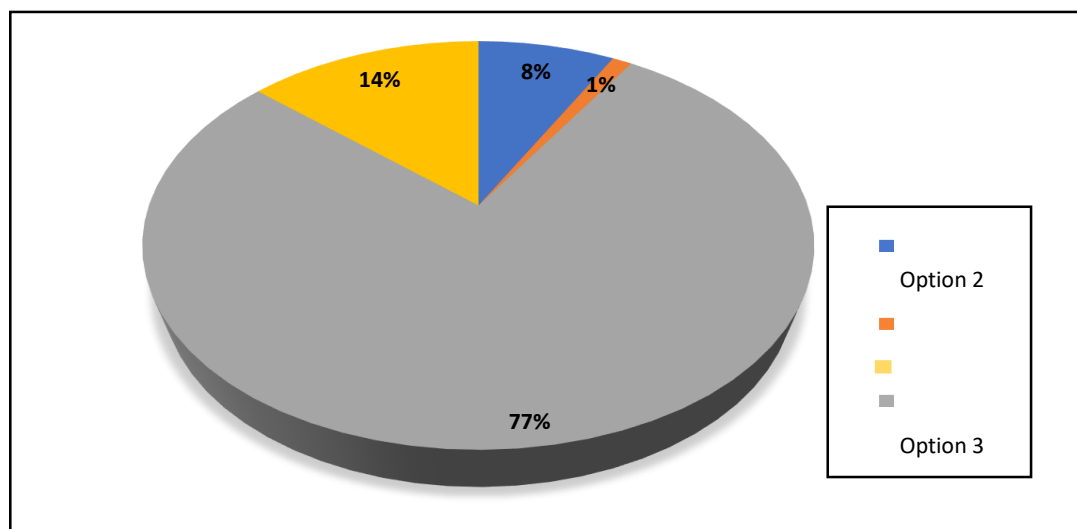
Chart No. 5.9 Chart showing identification of logo

INTERPRETATION: From the above chart it shows that 77% of the respondentsselected option 4, 14% selected option 1, 8% selected option 2, and 1% selected option3 for the identification of logo.

5.9   Trust in Gola India service-

Table No. 5.10 Table showing trust towards the service

Do you trust our service?	No. of Respondents	Percentage
Can't say	4	5%
Yes	84	95%
Grand Total	**88**	**100%**

Source: Survey Data

ANALYSIS: From the above table it shows that 95% of the respondents were havingtheir trust in the
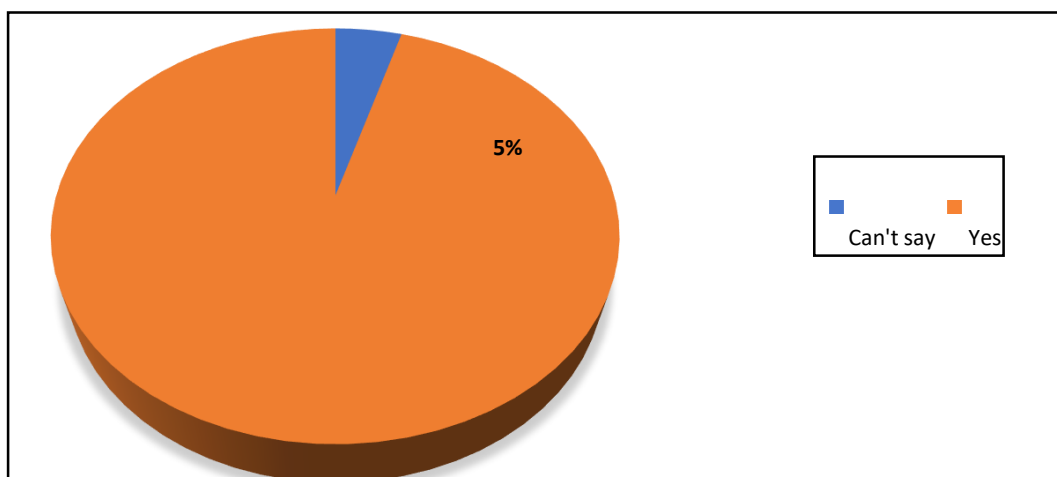
service while only 5% of the respondents select they can't say.

Chart No. 5.10 Chart showing trust towards the service

INTERPRETATION: The above-shown chart is about thecustomers/respondent's trust towards the company's service. The results for thisstatement are that 95% of respondents say yes to the statement, 0% people said no to the statement and 5% of respondents for the questionnaire tells that they can't say whether they have trust or not on the company's service.

5.10   Possibility of recommending the service to others

Table No. 5.11 Table shows Possibility of recommending the service to others

Like to recommend the Service to others.	No of Respondents	Percentage
Can't Say	8	9%
Yes	80	91%
Grand Total	**88**	**100%**

Source: Survey Data

ANALYSIS: Based on the above table, the majority of respondents (91%) would recommend the service to others, while a small portion (9%) are unsure or unable to provide a recommendation. This indicates a high level of satisfaction among the respondents with the service.
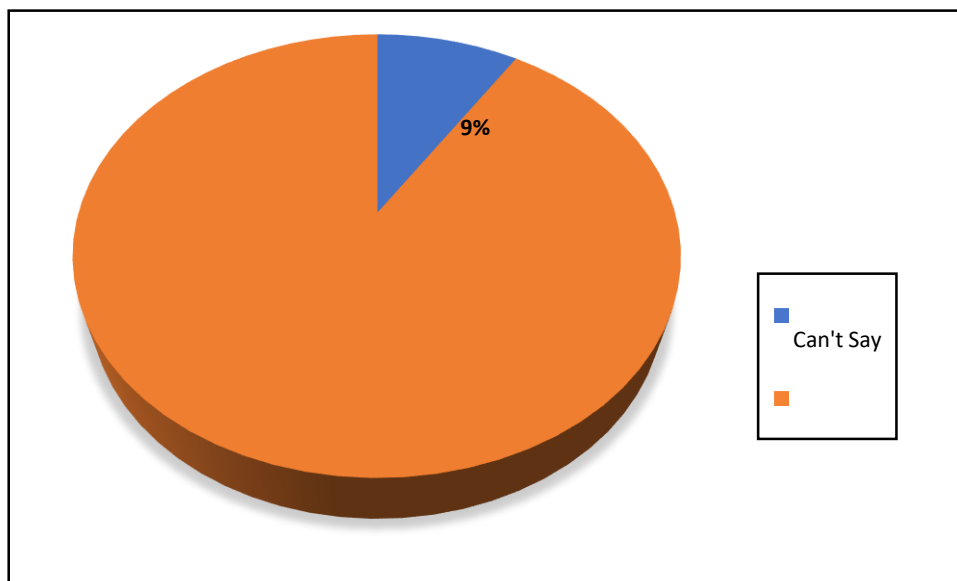
Chart No. 5.11 Chart shows Like to recommend the service to others.

INTERPRETATION: From the above chart, the service has received a favorable response from the majority of respondents, with a high percentage expressing awillingness to recommend it to others. This positive feedback can be seen as a valuableindicator of customer satisfaction and could be utilized to promote the service to a wideraudience.

5.11 **Usage of service of Gola India**

Table No. 5.12 Table shows respondents currently using Gola India service.

ntly, use ourservice	No. of Respondents	Percentage
No	42	48%
Yes	46	52%
Grand Total	**88**	**100%**

Source: Survey Data

ANALYSIS: Above table, shows that 52% of people are using the service provided by Gola India and 48% of the respondents were not using the service.
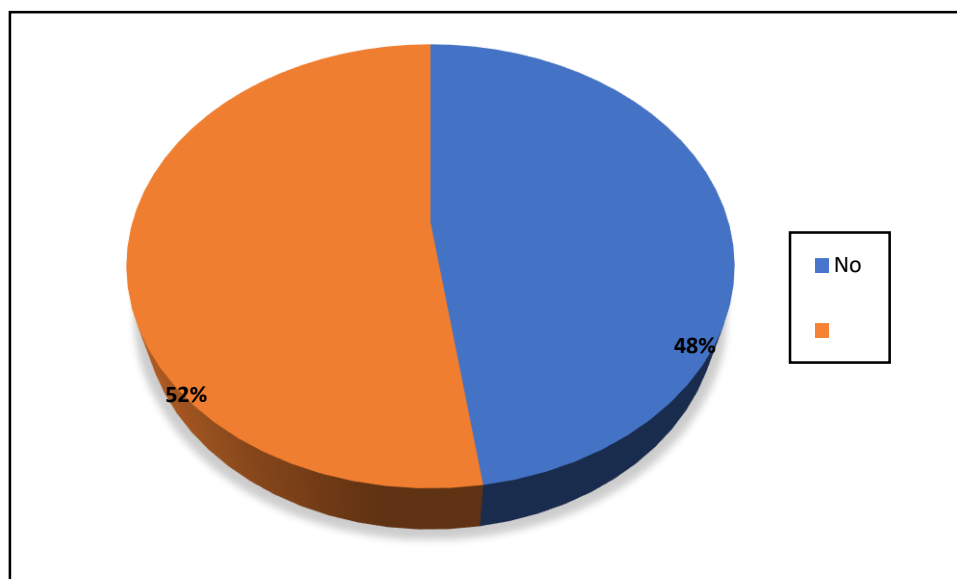
Chart No. 5.12 shows currently using our service.

INTERPRETATION: From the above chart, it shows that 52% of people are using the service provided by Gola India and 48% of the respondents were not using the service. This shows that the maximum number of customers from the surveys werenot using our service.

5.12 Rating of overall experience of Gola India

Table No. 5.13 Table shows Rating of overall experience

r experience withGola India	No. of Respondents	Percentage
2	1	2%
3	15	32%
4	22	47%
5	9	19%
Grand Total	**47**	**100%**

Source: Survey Data

ANALYSIS: From the above table it shows that the majority of respondents 47% rated their experience with Gola India as 4, indicating a positive overall sentiment. Additionally, 32% of the respondents rated their experience as 3, suggesting a slightlylower level of satisfaction but still generally positive. Furthermore, 19% of the respondents rated their experience as 5, indicating a high level of satisfaction.
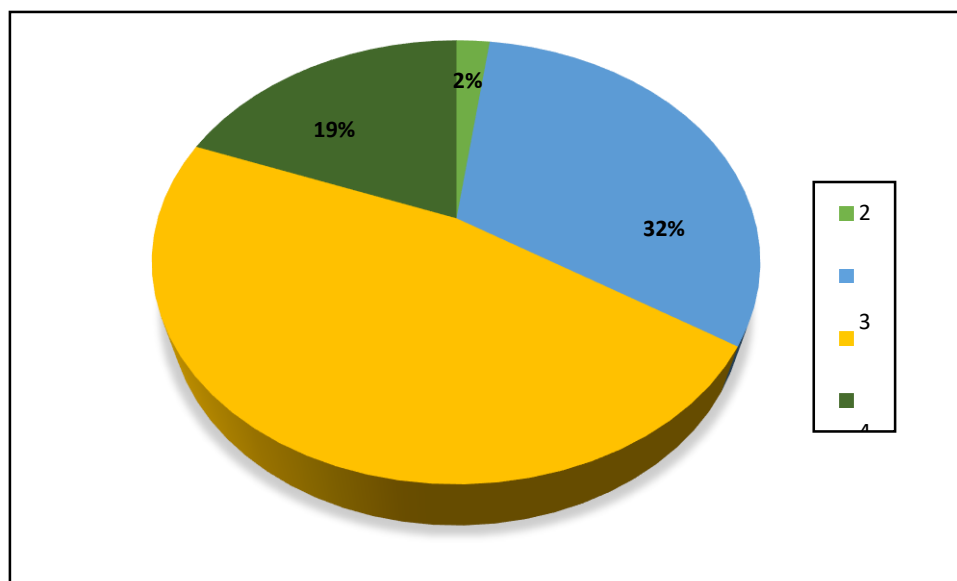
Chart No. 5.13 Chart shows Rating of overall experience

INTERPRETATION: From the above chart, it is clear that the majority of respondents had positive experiences with Gola India, with a majority rating their experience as 4 and a notable percentage rating it as 5. This indicates that the majorityof respondents are satisfied with the services provided by Gola India.

5.13 Need fulfillment by Gola India-

Table No. 5.15 Table shows that how well dose our service meets yourneeds

Scale	No. of Respondents	Percentage
3	16	18%
4	58	66%
5	14	16%
Grand Total	**88**	**100%**

Source: Survey Data

ANALYSIS: Above table shows that 66% of the respondent rated 4 stars and noneof the people rated to 1-star which means the Gola India service is successful in meeting customers' needs.
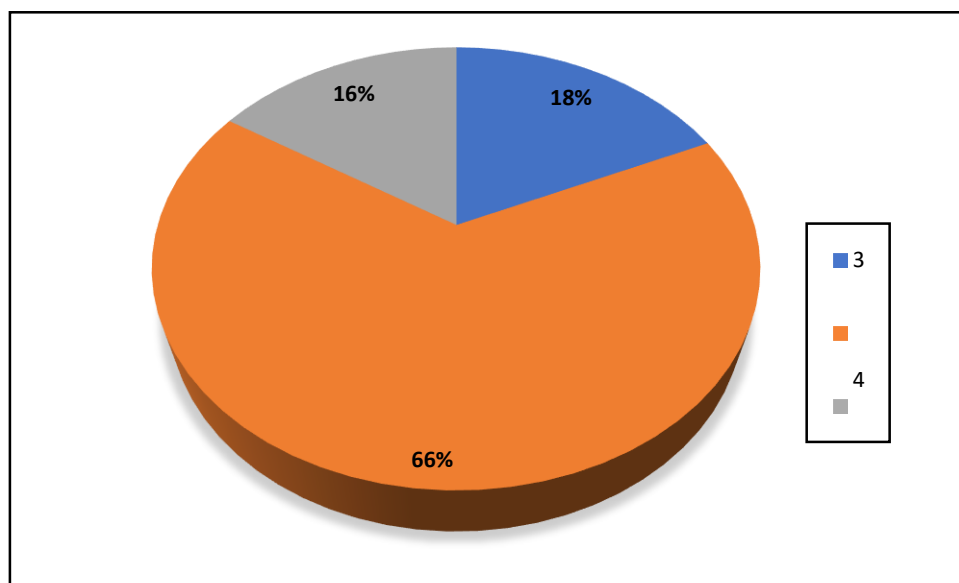
Chart No. 5.14 Chart shows that how well dose our service meets yourneeds

INTERPRETATION: From the above chart it shows that 66% of the respondentsrated to a 4-star scale, 18% rated to a 3-star scale, 16% have rated to a 5-star scale andnone of them have rated to 1–2-star scale. That means a majority of customers were successful in meeting their needs.

5.15 Satisfaction with Gola India Service

Table No. 5.15 Satisfaction with Gola India Service.

Scale	No. of Respondents	Percentage
Moderately Satisfied	12	14%
Satisfied	45	51%
Very Satisfied	31	35%
Grand Total	**88**	**100%**

Source: Survey Data

ANALYSIS: From the above, we come to know that the majority of the customers said that they are satisfied with the Brand (51%), the remaining customers said they were very satisfied (35%), moderately satisfied (14%), and none of the customers are disappointed by the Gola India Transportation Service.
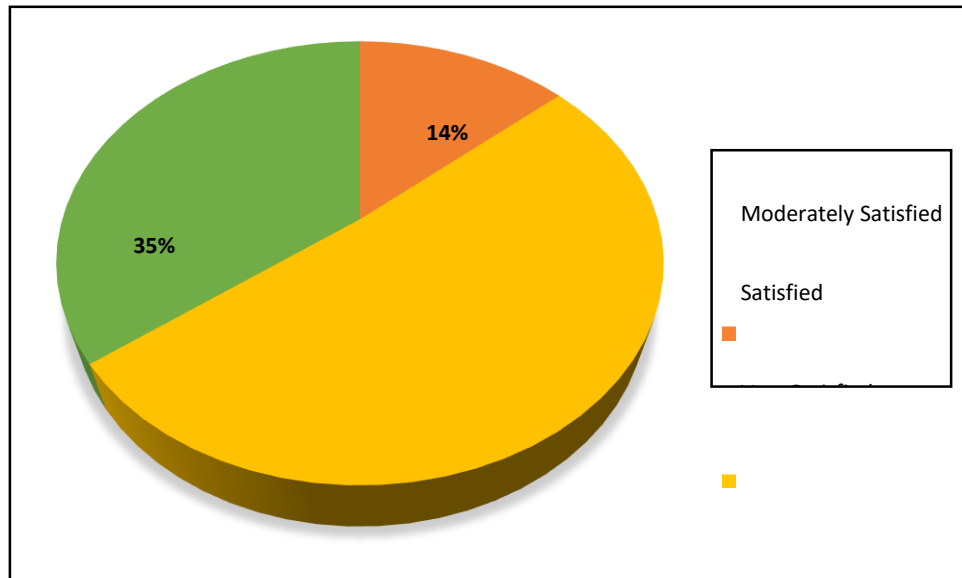
Chart No. 5.15 Table shows the Satisfaction with statement.

INTERPRETATION: The majority of respondents (51%) were satisfied with the subject of the survey. A significant portion (35%) reported being very satisfied, while a smaller proportion (14%) expressed being moderately satisfied. Overall, the satisfaction levels of the respondents were relatively high.

Findings:

1. Table no. 5.1 provides insights into the geographical distribution of respondents, it shows that the majority of the respondents were from Shiroli which means most of the research is carried out in Shiroli MIDC.

2. Table no. 5.2 indicates that the majority of respondents fall within the age range of 36-45, comprising 49% of the total. The age group of 26-35 follows closely behind with 35% of respondents. Respondents aged 45 and above represent 14%, while the youngest age group of 18-25 has the lowest representation at 2%.

3. Table no. 5.3 shows that the majority of respondents, comprising 61%, hold a degree qualification. Diploma holders represent 16% of the total, while both graduation and post-graduation qualifications are each represented by 11% of the respondents.

4. Table no. 5.4 indicates that the highest percentage of respondents, accounting for 33%, go on 10 trips per day. This is followed by 17% of respondents who go on 8 trips per day.

5. Table no. 5.5 indicates that a significant majority of respondents, comprising 86%, have heard of Gola India before. This suggests that Gola India enjoys a relatively high level of familiarity among the surveyed population.

6. Table no. 5.6 indicates that the majority of respondents, comprising 56%, know about Gola India

through salesmen. This suggests that salesmen play a significant role in disseminating information about Gola India.

7. Table no. 5.7 shows that the majority of respondents, comprising 57%, believe that creating a brand image is primarily achieved through good value-added service. Additionally, 32% of respondents consider both communication strategy and goodvalue-added service as important factors.

8. Table no. 5.8 indicates that respondents' knowledge about Gola India is spread across different time frames. An equal percentage of respondents, 24% each, reported knowing about Gola India before 15 days and before one month. Knowledge acquired last month represents 27% of respondents, while knowledge gained within the last week accounts for 25%. This suggests that awareness about Gola India has been relatively recent, with a significant proportion of respondents acquiring knowledge in the past month.

9. Table no. 5.9 indicates that the majority of respondents, comprising 77%, identified Option 4 (Gola India) as the logo. This suggests that Option 4 had the highest recognition and appeal among the surveyed population.

10. Table no. 5.10 indicates that the majority of respondents, comprising 95%, trust theservice provided by Gola India. This indicates a high level of trust among the respondents towards Gola India.

11. Table no. 5.11 indicates that a significant majority of respondents, that is 91%, express their willingness to recommend the service to others. This means a high level of satisfaction and positive sentiment towards the service, with a strong likelihood of word-of-mouth recommendations.

12. Table no. 5.12 reveals that the usage of the service is nearly evenly split among therespondents, with 52% currently using the service and 48% not using it. This indicates a relatively balanced distribution of current users and non-users among the surveyed population.

13. Table no. 5.13 indicates that the majority of respondents, comprising 47%, rated their experience with Gola India as a 4 out of 5. This shows that the majority of respondents were having positive sentiments towards Gola India.

14. Table no. 5.14 reveals that the majority of respondents, 66%, rated their experiencewith the given scale as a 4 out of 5. This suggests a generally positive sentiment and satisfaction among the surveyed population.

15. Table no. 5.15 indicates that the majority of respondents, that is 51%, reported being satisfied with their experience. Additionally, 35% of respondents expressed being very satisfied, while 14% reported being moderately satisfied. So, it represents that the majority of the respondents were satisfied with the service provided by Gola India.

Suggestions:

1. GOLA INDIA is poor in promotions so I suggest them to increase the promotional activities to attract the new customers.

2. They should focus on brand awareness and conduct both Above the line (ATL)& Below the line (BTL) advertisements.

3. **ATL** marketing refers to mass marketing activities that are aimed at reaching awide audience through traditional mass media channels such as **television, radio, print advertising, and outdoor advertising**. It focuses on creating brand awareness and visibility on a large scale. ATL marketing is often used totarget a broad audience and build brand recognition.

4. **BTL** marketing, on the other hand, involves targeted and personalized marketing activities that aim to engage with specific individuals or smaller groups. BTL strategies include **direct mail, email marketing, social media marketing, event marketing, experiential marketing, and public relations activities.** BTL marketing focuses on creating a direct and interactive relationship with the target audience, aiming to drive specific actions or responses.

Conclusion:

The study has been all about understanding brand awareness for Gola India. Studying brand awareness is important for businesses as it helps them to understand the level of recognition and recall that their brand has among their target audience. With the kind of responses, the conclusion can be made that they should have to work on their promotional strategy and build a strong promotional strategy for their service. Effectivebrand awareness strategies can include advertising, social media marketing, public relations, and other forms of communication.

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HR Analytics in Kolhapur based Industries

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Abstract:

This paper presents a comprehensive analysis of descriptive statistics and t-test results pertaining to diverse aspects of human resource management, organizational strategy, and the utilization of HR analytics. The data, gathered through surveys, offers valuable insights into how respondents perceive these facets within their organizations. The results showcase a generally positive on the application of HR analytics, highlighting the importance of maintaining up-to-date HR data, particularly in areas such as workforce statistics, human resource skills, and HR function efficiency. Additionally, the analysis explores into gender-based differences, revealing minor variations in perceptions between male and female respondents. However, these distinctions do not appear to be statistically significant, emphasizing the overall alignment in how employees of both genders view these crucial aspects. These findings offer appreciable implications for organizations aiming to comprehend their employees' perspectives and promote data-informed decision-making, ultimately enhancing their HR practices and strategies.

Key words:- HR analytics usage, Workforce statistics, Human resource skills and values, Efficiency and effectiveness of HR function, Competitive intensity, Organizational strategy

Introduction

Analytics is rapidly emerging as a discipline that combines computer knowledge with qualitative methods to address various management problems in contemporary organizations (Angrave et al., 2016). The complexity of today's business landscape and its demands necessitate intricate decision-making processes that involve multiple dimensions. This mandates organizations to adopt new methods and techniques capable of analyzing the facts and figures required for such decisions. Adapting to changing environments and responding to them has become crucial for survival (Guest, 2004).

The concept of HR Analytics can be traced back to the early 1990s through the writings of Fitz-Enz, J. (1995). In his book "How to Measure Human Resource Management," he sought to introduce a quantitative approach to the traditionally qualitative domain of Human Resource Management (Marler and John W. Boudreau, 2017). Although Human Resource (HR) Analytics is sometimes dismissed as a passing trend, Rasmussen and Ulrich (2015) argue that HR Analytics provides "evidence-based initiatives, data-driven decisions, a focus on HR investments," and scientific rigor and objectivity to HR decision-making, thus transforming the function from a mere staff or even a line function into a strategic one."

The necessity for HR metrics to comprehend the efficacy and efficiency of the HR Function was highlighted by Lawler et al. (2004), one of the first researchers in the field of developing metrics into HR Function. They emphasized that in order to give HR greater significance, it is imperative to comprehend the connection between HR procedures and business results. The writers were alluding to the necessity of giving the HR functions a Return on Investment (ROI) focus.

This sentiment is stressed by Bordeaux Ramstad (2006) who consider the HR Function to be highly "elegant and sophisticated" yet fails in terms of delivering the desired result it lacks robust and scientifically standard measures to assess its accountability in relation to measuring employee turnover, employee performance employee attitudes and the like. They accept the existence of a number of independent measures to identify the trends in the said areas but no specific all-encompassing technology to deal with these questions in a comprehensive and interrelated manner to lead to a holistic decision making. Bordeaux Ramstad (2006) emphasizes this point, saying that although the HR function is very "elegant and sophisticated," it falls short of producing the intended results because there are no reliable and accepted scientific methods for evaluating its accountability for tracking employee

performance, attitudes, and other related metrics. They acknowledge the presence of several independent metrics to pinpoint trends in the aforementioned fields, but they lack a single, all-encompassing technology to address these issues in a thorough and connected way that would enable decision-making from an integrated perspective.

According to Bontis (2010), the HR function's respectability depends on its capacity to implement complex modeling and assessment procedures. Bordeaux (2010) reiterates the need, in contrast to the often-stated elegance and sophistication of the HR Functions, of improving HR decision making through the use of analytics to increase predictive reliability.

Mack (2010) stresses the need of relevant and trustworthy qualitative indicators in closing the communication gap between senior management and HR specialists. According to Wilde (2010), this capability will improve forecasting of human capital and associated variables. The best metrics or measurements are still up for debate, though. Bassi (2011) emphasizes how important it is to comprehend the meaning of HR analytics and its intended applications. Along with the warning that there's no need to automatically associate the growing importance of the HR function with the usage of analytics. According to them, the goal of HR analytics is to raise both the corporate and individual values.

The deployment of merely statistical metrics or instruments will not accomplish the goal, claim Cascio and Boudreau (2011). In order to comprehend the link between variables and numbers, "logic models" must be developed. The authors argue that developing "mental frameworks" and a logical line of reasoning is necessary before attempting to acquire insights. This establishes the fundamental framework for HR analytics, upon which statistical measurements may then be added.

Research Gap

A notable research gap in the field of HR Analytics is the development and validation of standardized metrics that comprehensively assess various HR functions, such as employee turnover, performance, and attitudes, in a scientifically rigorous manner. While the importance of HR accountability has been emphasized, there remains a lack of universally accepted and well-established metrics that enable holistic decision-making in organizations. Addressing this research gap would contribute to the evolution of HR Analytics by providing HR professionals with reliable and standardized tools to assess the effectiveness of their practices, ultimately enhancing the strategic impact of HR within organizations.

The researcher has identified a reliable and standardized tool to assess the effectiveness of human resources, competitive intensity, and organizational strategy. This tool encompasses three key areas for evaluating the Degree of Application of HR Analytics:

The tool for assessing the Degree of Application of HR Analytics across the three areas of Relevance, Usage, and Effectiveness presents a comprehensive and structured framework for organizations to evaluate and enhance their HR Analytics practices. By systematically examining the alignment of HR Analytics with organizational goals, the frequency and effectiveness of its utilization, and its impact on performance and strategy, organizations can gain valuable insights into the maturity and success of their HR Analytics initiatives. This tool not only helps in understanding the current state of HR Analytics within an organization but also provides a roadmap for improvements, ultimately contributing to better decision-making and strategic outcomes. It serves as a valuable resource for HR professionals and leaders seeking to harness the full potential of HR Analytics to drive organizational success.

Cronbach Alpha Coefficients for Six Dimensions used in the Study

S.No.	Dimensions	Alpha	No. of Items
1	Organization & Its Human Resources	0.891	7
2	Organizations Competitive Intensity	0.909	6

3	Organizations Strategy	0.921	5
4	Degree of Application of HR Analytics	0.921	5
5	Degree of Application of HR Analytics -Relevance	0.916	4
6	Degree of Application of HR Analytics – Usage	0.974	4
7	Overall	0.911	31

The Cronbach's Alpha coefficients for the six dimensions in the study indicate the internal consistency and reliability of the measurement scales. The high Alpha values for "Organization & Its Human Resources" (0.891), "Organizations Competitive Intensity" (0.909), and "Organizations Strategy" (0.921) demonstrate that these dimensions effectively capture their respective constructs related to human resources, competitive intensity, and organizational strategy. However, the absence of a provided Alpha for "Degree of Application of HR Analytics" makes it difficult to assess its internal consistency, and it's important to calculate this Alpha to determine the reliability of the scale. "Degree of Application of HR Analytics - Relevance" (0.916) and "Degree of Application of HR Analytics – Usage" (0.974) show exceptionally high internal consistency, indicating that they reliably measure the relevance and usage of HR analytics in the study, suggesting that these scales are robust for assessing these dimensions.

Objectives of the study
In the modern workplace, understanding the dynamics of human resources, competitive intensity, organizational strategy, and the role of analytics has become increasingly crucial for organizational success. Gender diversity within the workforce is a prominent aspect of organizational composition. This study aims to investigate the relationships between gender and key dimensions within the organizational context. Specifically, it explores how gender may influence opinions regarding the HR function, perceptions of competitive intensity, the extent of organizational strategy implementation, the level of HR function implementation, perceptions of the relevance of HR analytics, and the extent of usage of HR analytics. Through these objectives, we seek to gain valuable insights into how gender may play a role in shaping organizational dynamics and perceptions.
1) To Examine the Relationship Between Gender and Opinions Regarding the HR Function
2) To Assess the Relationship Between Gender and Perceptions of Competitive Intensity
3) To Investigate the Relationship Between Gender and the Extent of Implementation of Organizational Strategy
4) To Explore the Relationship Between Gender and the Level of Implementation of the HR Function
5) To Examine the Relationship Between Gender and Perceptions of the Relevance of HR Analytics
6) To Assess the Relationship Between Gender and the Extent of Usage of HR Analytics

Research Methodology
The researcher in this study utilized survey research as a research method, involving the use of standardized questionnaires or interviews to collect data about people's preferences. The primary data was collected using the questionnaire method. Dillman (2000) distinguishes between three types of data variables that can be collected through questionnaires: 1. Opinion, 2. Behavior, and 3. Attribute. Different items in the questionnaire indicate various scale factors, i.e., variables related to both the dependent variable and intervening variables were provided on a Likert scale of five points. The five response categories, along with the numerical values assigned to them for computational purposes, are as follows: Strongly Agree (5), Agree (4), Neutral (3), Disagree (2), and Strongly Disagree (1). Since

the questionnaire used a five-point scale, average scores of 3 and around indicate a moderate tendency on that dimension exists, and scores around 4 indicate a strong presence of that dimension.

The scale used in the questionnaire was adopted from Beesetti MB (2020).

The researcher prepared a Google Form to collect the data and distributed it among HR professionals. The researcher received 190 responses.

Hypothesis

1) (Ho1): There is no significant relationship between demographic variables Gender and opinions regarding the HR Function.
2) (Ho2): There is no significant relationship between demographic variables Gender and perceptions of Competitive Intensity.
3) (Ho3): There is no significant relationship between demographic variables Gender and the extent of implementation of the organizational strategy.
4) (Ho4): There is no significant relationship between demographic variables Gender and the level of implementation of the HR Function.
5) (Ho5): There is no significant relationship between demographic variables Gender and perceptions of the relevance of HR Analytics.
6) (Ho6): There is no significant relationship between demographic variables Gender and the extent of usage of HR Analytics.

Descriptive statistics of opinion regarding HR Functions

Items	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
I am with the current organisation	4.3053	.83664	-1.941	.176	5.222	.351
our organisation structure is flat in hierarchy	4.3474	.51984	.183	.176	-.986	.351
there are few levels in our organisational hierarchy	4.4842	.59740	-.992	.176	1.552	.351
Even small matters have to be referred to someone higher up for a final answer	4.3474	.63859	-.827	.176	1.333	.351
Hardly any action can be taken until my Supervisor approves a decision	4.5368	.61396	1.799	.176	13.089	.351
Employees in this Organization learn how to perform variety of tasks	4.5895	.51424	-.602	.176	-1.100	.351
Employees in this Organization are Cross Trained so that they can fulfill for others if necessary	4.5158	.60620	-1.285	.176	2.701	.351

The descriptive statistics presented for the items related to opinions regarding HR functions offer valuable insights into how respondents perceive various aspects of their organization's operations and structure. The mean scores reveal the average sentiment for each item, and, on a scale where higher

scores indicate more positive opinions, it's evident that, on average, respondents hold moderately positive views for most of the statements.

The skewness and kurtosis statistics help shed light on the shape and distribution of the data. Notably, for some items, such as "Hardly any action can be taken until my Supervisor approves a decision," the data exhibits significant skewness and kurtosis. This suggests that there are likely extreme responses in both directions, possibly indicating polarized views within the sample.

Items like "Our organization structure is flat in hierarchy" and "Employees in this Organization learn how to perform a variety of tasks" show less variability, with skewness and kurtosis statistics indicating more symmetric and lighter-tailed distributions. This suggests that respondents' opinions on these aspects are more clustered around the mean, with fewer extreme responses.

Descriptive statistics of opinion regarding Organisations Competitive Intensity

Items	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
The HR-Capital Ratio Percentage (Ratio Between costs of Human Resources and total operational costs inclusive Manpower) in our Organization is Adequate	4.4789	.55117	-.395	.176	-.937	.351
My Organization has been in existence in this industry for more than 1 Decade	4.5263	.56983	-1.058	.176	2.053	.351
My Organization employs more than 1000 employees across the Globe	4.3684	.60950	-.687	.176	.997	.351
Competition in our Industry is cut-throat	4.4737	.61450	-1.143	.176	2.251	.351
Anything that one Competitor can offer, others can match easily	4.3263	.74097	-1.790	.176	5.745	.351
Price Competition is a hallmark of our industry	4.6105	.53044	-1.098	.176	1.470	.351

The descriptive statistics provide a comprehensive insight into how respondents perceive the competitive intensity within their organization and industry context. On average, respondents consider the HR-capital ratio in their organization to be adequate, reflecting a sense of balance between human resource costs and overall operational costs. Similarly, they take pride in their organization's long-standing presence in the industry, suggesting a sense of tradition and stability. The perception of a global workforce in the organization indicates an awareness of the organization's international scale. Furthermore, the industry itself is perceived as highly competitive, with respondents agreeing on a cut-throat environment where competitors easily match each other's offerings, reflecting intense market competition, especially regarding pricing strategies.

The presence of both negative and positive skewness, along with the varying kurtosis values, indicates that there are diverse opinions within the sample, with some respondents expressing strong agreement with these statements and others holding different perspectives. These statistics not only provide a snapshot of respondents' perceptions but also highlight the potential polarization of viewpoints, which can be vital for organizations in understanding how their employees perceive the competitive dynamics both within and outside the organization.

Descriptive statistics of opinion regarding Organisation Strategy

Items	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
One hears of a new competitive move almost every week	4.5263	.63981	-1.385	.176	2.352	.351
My Organization offers a wide variety of Products / Services	4.4947	.58867	-1.159	.176	2.770	.351
My Organization has a very diverse customer group	4.2895	.54955	-.553	.176	2.872	.351
My Organization is innovative in terms of the novelty of new Products / Services Offered	4.5368	.58753	-1.172	.176	2.035	.351
My Organization allots a large amount of Resources to R&D and Training	4.4947	.66466	-1.510	.176	3.112	.351

The descriptive statistics for respondents' opinions on organizational strategy shed light on various critical dimensions of strategic practices within the organization. The higher mean score for "One hears of a new competitive move almost every week" suggests that respondents generally perceive a dynamic and fast-paced competitive environment, with many strongly agreeing with this sentiment. This indicates that the organization is frequently exposed to and engaged in competitive developments, which could be a sign of an active and adaptable business landscape. However, the negative skewness and positive kurtosis suggest that while there's a predominant agreement, there might be a polarization of opinions, with some respondents perceiving the competitive landscape as even more dynamic and competitive than others.

The next aspect, "My Organization offers a wide variety of Products / Services," aligns with the organization's reputation for diverse offerings, as evidenced by the high mean score. The negative skewness underscores a consensus among respondents, but the positive kurtosis indicates that there are extremes in responses. Some may view the organization's product and service variety as exceptionally extensive, while others may consider it merely diverse.

Descriptive statistics of opinion regarding Degree of Application of HR Analytics

My Organization allows a large number of Resources to Marketing	4.5211	.52158	-.311	.176	-1.393	.351

In My Organization HR Analytics full-fill the need of Providing basic HR Reporting (Eg Data from ERP and HCM Systems such as Turnover and Employee Satisfaction)	4.4263	.58404	-.434	.176	-.701	.351
In My Organization HR Analytics full-fill the need of Providing HR value-added Metrics (Eg. Insight in performance rating and recruitment process effectiveness)	4.4526	.74562	1.905	.176	14.189	.351
In My Organization HR Analytics full-fill the need of Providing Integrated Talent Management Metrics (Eg Combined Information such as Percentage of Higher Performers Retention)	4.5316	.50032	-.128	.176	-2.005	.351
In My Organization HR Analytics full-fill the need of Providing Business Driver Analytics (Eg. Business Impact of HR Measures such as Impact of Employees Turnover on Financial Performance)	4.4684	.53110	-.194	.176	-1.272	.351

The descriptive statistics related to the degree of application of HR analytics in various aspects of organizations shed light on respondents' perceptions. On average, respondents appear to believe that HR analytics is applied effectively in their organizations. The means for each item are all above 4, indicating agreement with statements related to HR analytics utilization.

Notably, the responses regarding HR value-added metrics exhibit a considerably high positive skewness and kurtosis, signifying that many respondents strongly agree that HR analytics provides valuable insights into performance ratings and recruitment process effectiveness. Similarly, the integrated talent management metrics item shows a relatively balanced distribution but with slightly heavier tails, indicating a consensus on its effectiveness. The other items reflect a more moderate level of agreement, with generally symmetric distributions, suggesting that respondents, in general, see their organizations as adequately applying HR analytics.

These statistics can help organizations assess how their employees perceive the application of HR analytics in different domains, highlighting areas of strength and those that might require further development or communication to align employee perceptions with organizational goals.

Descriptive statistics of opinion regarding Degree of Degree of Application of HR Analytics – Relevance

	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
In My Organization Basic univariate statistics (mean, median, mode, percentiles, standard deviation etc.,) are adopted in our HR Analytics	4.5211	.57004	-1.036	.176	2.007	.351
In My Organization Advanced univariate statistics (correlation, keenness, difference in means, distribution of a variable etc) are adopted in our HR Analytics	4.3895	.52037	-.115	.176	.360	.351

In My Organization Basic multivariate statistics (ANOVA, Factor Analysis, Regression, Logit/ Probit, Survival/Hazard Analysis etc.,) are adopted in our HR Analytics	4.4158	.52530	.011	.176	-1.273	.351
In My Organization Advanced multivariate statistics (Structural Equations, Fixed-Effects Models, Maximum Likelihood Models etc) are adopted in testing direct and indirect efforts of variables on one another	4.4421	.51877	.005	.176	-1.474	.351

The descriptive statistics regarding the degree of application of HR analytics techniques shed light on how respondents perceive the analytical practices within their organizations. On average, respondents express agreement with the adoption of both basic and advanced univariate and multivariate statistical methods, indicating a generally positive view of the organization's HR analytics capabilities. The data's skewness and kurtosis values suggest that respondents tend to have moderately strong opinions, with a notable proportion strongly agreeing with these practices.

These findings are encouraging, suggesting that organizations place importance on employing a variety of statistical techniques in their HR analytics efforts. However, organizations should continue to assess and potentially expand their analytics practices, especially in advanced multivariate statistical methods, to ensure they stay competitive and effectively leverage data for HR-related decisions and insights. The consensus among respondents provides a valuable foundation for organizations to build upon as they continue to evolve their HR analytics strategies.

Descriptive statistics of opinion regarding Degree of Degree of Application of HR Analytics -Usage

In My Organization Workforce Statistics (Eg Gender, Age, Absenteeism, Job Type, Ethnic Origin etc) is updated on a regular basis	4.4947	.69577	2.781	.176	16.658	.351
In My Organization Measure of Human Resource's Skills/values (Eg Index of Key Quality such as Experience, Knowledge & Skill, Competencies & Attitude, Values, Potential, Performance and Employee Engagement etc) is updated on a regular basis	4.4632	.52069	-.079	.176	-1.477	.351
In My Organization Measure of Efficiency and Effectiveness of the HR Function (Eg Cost Ratio, Rates of Participation, Efficiency and Effectiveness of Processes such as Appraisals, Recruitment, Succession Planning and Training etc) is updated on a regular	4.5053	.54187	-.424	.176	-1.013	.351

The descriptive statistics offer valuable insights into the degree of application of HR analytics usage within organizations. Specifically, they shed light on the regularity of updating critical HR data and metrics. The data suggests that, on average, respondents strongly agree that workforce statistics, encompassing factors like gender, age, absenteeism, job types, and ethnic origin, are consistently updated, underscoring the significance of keeping these demographic and workforce-related insights current. This is evident in the notably positive skewness and kurtosis values, indicating a substantial consensus among respondents with a strong emphasis on up-to-date workforce data.

Similarly, the measures of human resource skills and values appear to be regularly updated, with respondents on average expressing agreement. The close-to-zero skewness and slightly negative

kurtosis indicate that there is consensus and moderate clustering of opinions around the mean. Moreover, the measure of HR function efficiency and effectiveness, covering areas like cost ratios, participation rates, and the efficiency of various HR processes, is also reportedly updated on a regular basis, reflecting broad agreement among respondents. The slightly negative skewness and kurtosis values suggest that opinions tend to cluster around the mean, reaffirming the importance of data-driven evaluations of HR functions. These statistics collectively signify the commitment of organizations to maintaining up-to-date HR analytics, enabling data-informed decisions and strategies across different facets of human resource management.

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Human Resource Function	Male	165	4.4545	.49945	.03888
	Female	25	4.5200	.50990	.10198
Organization's Competitive Intensity	Male	165	4.6061	.50240	.03911
	Female	25	4.5600	.50662	.10132
Organization's Strategy	Male	165	4.5091	.52520	.04089
	Female	25	4.4800	.58595	.11719
Degree of Application of HR Analytics	Male	165	4.5515	.54556	.04247
	Female	25	4.3600	.56862	.11372
Application of HR Analytics using Statistics	Male	165	4.5939	.49259	.03835
	Female	25	4.5600	.50662	.10132
Application of HR Analytics – Usage	Male	165	4.4970	.52527	.04089
	Female	25	4.5600	.50662	.10132

The above statistics offer a comparative perspective on how male and female respondents perceive various facets of human resources, organizational strategy, and the application of HR analytics. In general, both genders tend to rate these aspects positively, indicating a favorable view of the HR function, organization's competitive intensity, strategy, and HR analytics. While there are variations in mean scores between males and females, these differences are relatively small, suggesting that there might not be substantial gender-based distinctions in these perceptions. However, it's essential to consider the sample size for females, which is notably smaller, and bear in mind that more extensive research and in-depth analysis would be necessary to draw definitive conclusions regarding gender-based differences in these perceptions.

These findings could be valuable for organizations seeking to understand the nuances of how their employees, both male and female, perceive and evaluate crucial aspects of HR and organizational practices. It might also indicate that, in the context of the survey's questions, gender may not be a significant determinant of these perceptions, emphasizing the overall alignment in how employees of both genders view HR and organizational aspects.

Independent samples t-tests for various aspects, including the Human Resource Function, Organization's Competitive Intensity, Organization's Strategy, Degree of Application of HR Analytics, Application of HR Analytics using Statistics, and Application of HR Analytics – Usage.

	Levene's Test for Equality of Variances		t-test for Equality of Means					
	F	Sig.	t	df	Sig. (2-	Mean	Std. Error	95% Confidence Interval of the Difference

				t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Human Resource Function	Equal variances assumed	.130	.719	-.609	188	.543	-.06545	.10748	-.27747	.14656
	Equal variances not assumed			-.600	31.388	.553	-.06545	.10914	-.28794	.15703
Organization's Competitive Intensity	Equal variances assumed	.146	.703	.427	188	.670	.04606	.10794	-.16687	.25899
	Equal variances not assumed			.424	31.582	.674	.04606	.10861	-.17529	.26741
Organization's Strategy	Equal variances assumed	1.167	.281	.254	188	.800	.02909	.11446	-.19671	.25489
	Equal variances not assumed			.234	30.133	.816	.02909	.12412	-.22434	.28252
Degree of Application of HR Analytics	Equal variances assumed	.035	.851	1.627	188	.105	.19152	.11773	-.04073	.42376
	Equal variances not assumed			1.578	31.073	.125	.19152	.12140	-.05605	.43908
Application of HR Analytics using Statistics	Equal variances assumed	.298	.586	.320	188	.749	.03394	.10611	-.17538	.24325
	Equal variances not assumed			.313	31.274	.756	.03394	.10834	-.18694	.25482
Application of HR Analytics – Usage	Equal variances assumed	.726	.395	-.562	188	.575	-.06303	.11223	-.28442	.15836
	Equal variances not assumed			-.577	32.329	.568	-.06303	.10926	-.28551	.15945

The above table includes the results of independent samples t-tests for different variables based on gender, along with Levene's test for equality of variances:-
(Ho1): There is no significant relationship between demographic variables Gender and opinions regarding the HR Function.

The t-test results for the HR Function show that the p-value is 0.543 when equal variances are assumed and 0.553 when equal variances are not assumed. In both cases, the p-value is greater than the common alpha level of significance (e.g., 0.05). Therefore, we fail to reject Ho1, suggesting that there is no significant difference between males and females in their opinions regarding the HR Function.

(Ho2): There is no significant relationship between demographic variables Gender and perceptions of Competitive Intensity. The t-test results for Competitive Intensity indicate a p-value of 0.670 when equal variances are assumed and 0.674 when equal variances are not assumed.

We also fail to reject Ho2, indicating that there is no significant difference between males and females in their perceptions of Competitive Intensity.

(Ho3): There is no significant relationship between demographic variables Gender and the extent of implementation of the organizational strategy. The t-test for Organization's Strategy results in a p-value of 0.800 when equal variances are assumed and 0.816 when equal variances are not assumed.

Therefore, we fail to reject Ho3, suggesting that there is no significant difference between males and females in their perceptions of the implementation of organizational strategy.

(Ho4): There is no significant relationship between demographic variables Gender and the level of implementation of the HR Function. For Degree of Application of HR Analytics, the p-value is 0.105 when equal variances are assumed and 0.125 when equal variances are not assumed.

We fail to reject Ho4, indicating that there is no significant difference between males and females in their perceptions of the level of implementation of the HR Function.

(Ho5): There is no significant relationship between demographic variables Gender and perceptions of the relevance of HR Analytics. The t-test results for Application of HR Analytics using Statistics show a p-value of 0.749 when equal variances are assumed and 0.756 when equal variances are not assumed.

We fail to reject Ho5, suggesting that there is no significant difference between males and females in their perceptions of the relevance of HR Analytics.

(Ho6): There is no significant relationship between demographic variables Gender and the extent of usage of HR Analytics. For Application of HR Analytics – Usage, the p-value is 0.575 when equal variances are assumed and 0.568 when equal variances are not assumed.

We also fail to reject Ho6, indicating that there is no significant difference between males and females in their extent of usage of HR Analytics.

In summary, the results of the t-tests for all variables suggest that there is no significant relationship between gender and the respective opinions and perceptions, as stated in the null hypotheses (Ho1-Ho6).

Scope for the further research

The results of the current analysis offer valuable insights into how respondents' gender may or may not impact their perceptions regarding various aspects of human resources, organizational strategy, and HR analytics. However, they also open up opportunities for further research in several areas: This analysis focused on gender differences in perceptions. A more extensive study could explore how gender interacts with other variables like age, job role, or tenure in the organization to provide a more comprehensive understanding of workplace dynamics.

While quantitative analysis provides statistical insights, qualitative research methods such as interviews or focus groups could help uncover the reasons behind gender-related differences or similarities in perceptions. This qualitative data can offer more nuanced explanations and uncover areas for improvement.

Expanding the comparative analysis to include not only gender but also other demographic factors could reveal more nuanced insights. Comparing different groups within the organization can help identify areas where specific demographics perceive significant differences in HR practices or organizational aspects.

It might be beneficial to perform similar studies within specific industries, as industry context can significantly influence perceptions. Comparing perceptions of HR practices across various sectors can offer insights into the unique challenges each industry faces.

Findings and observations: -

The descriptive statistics for Degree of Application of HR Analytics suggest that, on average, respondents agree that HR analytics are applied in their organizations.

The highly positive skewness and kurtosis values for HR value-added metrics and integrated talent management metrics indicate that many respondents strongly agree with the effectiveness of HR analytics in providing insights into performance ratings, recruitment process effectiveness, and integrated talent management.

Respondents generally hold positive views about the application of HR analytics techniques, and these statistics are indicative of a strong consensus among respondents.

Respondents, on average, rate the Application of HR Analytics using Statistics positively, indicating a general agreement with the statement.

The relatively balanced distribution and moderately positive skewness and kurtosis suggest a consensus among respondents with opinions moderately clustered around the mean.

The data regarding Application of HR Analytics – Usage reveals that, on average, respondents agree with the extent of usage of HR analytics in their organizations.

Both male and female respondents hold moderately positive views about the Application of HR Analytics – Usage. Although the sample size for females is smaller, the differences in mean scores between genders are relatively small.

The t-test results further confirm that there is no significant difference between males and females regarding their opinions on the extent of usage of HR analytics.

Gender-based comparisons of respondents' perceptions regarding various aspects related to HR, organizational strategy, and HR analytics do not reveal significant differences.

The t-test results, along with Levene's test for equality of variances, suggest that there is no substantial gender-based distinction in how respondents perceive these aspects.

The results indicate that, in the context of this survey, gender does not appear to be a significant determinant of perceptions related to HR and organizational practices. This emphasizes the overall alignment in how male and female employees view these aspects in the organizations surveyed.

Overall, the descriptive statistics reveal that organizations place importance on employing HR analytics and statistical techniques to make data-informed decisions. Additionally, the findings from gender-based comparisons indicate that both male and female employees have similar perceptions regarding HR and organizational aspects. However, it's important to recognize that these findings are specific to the context of this survey, and further research may be needed to explore the reasons behind these perceptions and to identify areas for potential improvement or alignment with organizational goals.

Suggestions and Recommendations

Based on the statistical analysis and interpretations provided, here are some suggestions and recommendations:

The data indicate that organizations prioritize the regular updating of critical HR data and metrics, which is crucial for data-informed decision-making. To further enhance this practice, organizations should consider implementing robust data management systems and processes to ensure the timely and accurate updating of workforce statistics, HR skills/values metrics, and efficiency/effectiveness measurements. Regular audits and data quality checks can also help maintain data integrity.

The analysis of gender-based differences in perceptions suggests that, in the context of the survey questions, gender might not be a significant determinant of these perceptions. However, to ensure that employees of all genders feel heard and valued, organizations should continue to promote open communication channels. Regular surveys and feedback mechanisms can provide insights into employee sentiments and enable organizations to address any concerns effectively.

Even though gender-based differences in perceptions may not be substantial, organizations should maintain a strong commitment to diversity and inclusion. Beyond gender, factors like age, ethnicity, and job types can significantly impact the work environment. Organizations should continue to invest in diversity and inclusion initiatives, providing equal opportunities and promoting a culture of respect and belonging for all employees.

The statistics related to the degree of application of HR analytics highlight the positive perception of respondents regarding the organization's HR analytics capabilities. However, organizations should not become complacent and should regularly evaluate and update their HR analytics practices to stay competitive. Considerations may include exploring advanced multivariate statistical methods and continuously adapting to evolving data analytics trends and tools to derive more meaningful insights for HR decision-making.

The analysis of competitive intensity suggests that respondents perceive a dynamic and competitive business landscape. Organizations should leverage this perception as an opportunity to further enhance their adaptability and agility. To stay competitive, it's crucial to stay attuned to market developments, continuously innovate products and services, and maintain a proactive approach to change.

The perceptions related to organizational strategy suggest that respondents see a dynamic and fast-paced competitive environment. This provides an opportunity for organizations to invest in employee training and development programs to ensure that employees are well-equipped to navigate such an environment. Continuous learning and skill development can enhance organizational competitiveness.

The data-informed nature of HR analytics, reflected in the statistics, underlines the importance of consistent data-driven decision-making. Organizations should foster a culture of evidence-based HR practices, ensuring that HR analytics data is not only collected but also effectively utilized for strategic HR planning, performance evaluation, and other HR functions.

While the t-test results suggest no significant gender-based differences in perceptions, organizations can encourage employee participation in decision-making and strategy development. This can foster a sense of ownership and engagement, making employees feel more connected to the organization's goals and strategies.

Organizations should continue to monitor HR data regularly to ensure its relevance and accuracy. This involves staying updated with industry best practices, implementing data security measures, and leveraging data analytics tools to derive actionable insights from HR data.

Given the polarized views in some aspects highlighted by the t-tests, organizations may consider offering diversity and inclusion training to employees to foster understanding and inclusivity. Such training can help bridge gaps in perceptions and promote a more cohesive work environment.

These suggestions and recommendations aim to help organizations maintain data integrity, foster a positive work environment, enhance competitiveness, and ensure a data-informed approach to HR and organizational strategy. It's essential for organizations to adapt and evolve based on data and employee feedback to achieve success in today's dynamic business landscape.

Conclusion

The analysis of these descriptive statistics and t-test results reveals that, on average, both male and female respondents hold moderately positive views across various aspects of human resources, organizational strategy, and the degree of application of HR analytics. While there are minor variations in mean scores between genders, these differences do not reach statistical significance. The overall alignment in perceptions indicates that gender may not be a significant determinant of these particular opinions and viewpoints. However, it's crucial to acknowledge the relatively smaller sample size for females and the need for further extensive research to draw definitive conclusions. These findings can be valuable for organizations seeking insights into how their employees perceive these key areas and suggest that their policies and practices resonate similarly with employees of different genders.

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Cloud-Powered Retail Management Study: Elevating Business Operations with Cloud based POS Solutions over In-house POS

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Abstract: Cloud computing has emerged as a game changer in the retail industry, allowing firms to run their operations in a flexible, scalable, and cost-effective manner. This article examines cloud-powered retail management in depth, focusing on the shift from traditional on-premises systems to cloud-based solutions. It delves into the various cloud computing service models, such as Infrastructure as a Service (IaaS), Platform as a Service (PaaS), and Software as a Service (SaaS), emphasizing their importance in improving retail operations. The concept of hybrid cloud POS is introduced as a strong tool for businesses wishing to optimize their IT infrastructure by combining public and private cloud resources. The article also covers the benefits of cloud-based POS systems in expediting sales, inventory management, and customer relations.

Keywords: Cloud computing, POS Systems, Cloud POS, Cloud Models & Service

I.   INTRODUCTION

As a result of technology advancements and altering consumer tastes, the retail business is undergoing considerable changes. One of the most crucial factors in this change has been the usage of cloud computing, which has altered the way firms run their operations and communicate with customers. This article investigates the concept of cloud computing and its role in modern retail management. It also discusses the traditional retail management process and the challenges it faces in the digital age, necessitating the employment of cloud-based solutions. The content also highlights the advantages of cloud-based POS systems and their impact on retail operations. To move retail organizations forward, the emphasis is on cloud solutions.

Cloud computing refers to the delivery of various services, including computing power, storage, databases, networking, software, and more, over the internet. Instead of owning and managing physical hardware and software resources, organizations can access and use these services on-demand from cloud service providers. [4]Here are some key aspects and components of cloud computing:

Service Models: In the context of cloud computing, service models refer to the many methods by which cloud services are made available to customers. These models specify the amount of responsibility and control users have over the underlying infrastructure as well as the kinds of services they can consume. Cloud computing has three main service models:

Infrastructure as a Service (IaaS): In the IaaS concept, cloud service providers provide online access to virtualized computing resources. These resources typically include networking, storage, and virtual machines (VMs).Users have extensive control over the operating systems, programs, and parameters inside their virtual machines (VMs).Users who desire more freedom and control over managing and customizing their virtualized environments may consider IaaS. It is frequently used for operations like hosting web applications, managing scalable workloads, and operating development and testing environments.

Platform as a Service (PaaS): PaaS offers a platform with tools and services that developers can use to build and deploy applications. It abstracts the underlying infrastructure, allowing developers to focus on coding. Software as a Service (SaaS): SaaS delivers software applications over the internet. Users can access these applications through a web browser without needing to install or maintain them locally.

Models of Deployment: Third-party cloud providers, such as Amazon Web Services (AWS), Microsoft Azure, or Google Cloud Platform (GCP), host and deliver services on the public cloud. [5]They are available to anyone who has access to the internet. Private clouds dedicate resources to a single organization, and the cloud architecture can be hosted on-premises or by a third-party provider. Private clouds provide more control and security. The term "hybrid cloud" refers to the combination of public and private cloud resources. Companies can employ public cloud services for scalability and flexibility while storing sensitive data and important tasks in a private cloud.

Benefits of Cloud: Scalability, cost-efficiency, flexibility, and accessibility are just a few of the benefits of cloud computing. Organizations may simply scale up or down their resources to meet shifting demands, minimizing the need for costly upfront hardware investments. Pay-as-you-go pricing strategies aid in cost control by charging only for resources consumed. [6]The flexibility of the cloud allows for the rapid deployment of apps and services, while access from anywhere with an internet connection promotes collaboration and remote work. Furthermore, cloud providers invest in robust security and compliance procedures that typically outperform what many organizations can achieve on their own, improving data protection and regulatory compliance. Overall, cloud computing enables firms to more effectively innovate, compete, and adapt to changing market conditions. Cloud computing has revolutionized the way businesses and individuals use and manage their IT resources, offering flexibility, scalability, and cost-efficiency. It has become an integral part of modern technology infrastructure for organizations of all sizes and industries.

II.   LITERATURE REVIEW

Point of Sale (POS) systems have witnessed a remarkable transformation since their inception in the early 20th century as mechanical cash registers [1]. The evolution from mechanical to electronic registers in the late 20th century marked a significant shift in transactional technology [1]. In contemporary times, modern POS systems have transcended conventional boundaries by integrating sophisticated features like touchscreen interfaces, cloud connectivity, and mobile solutions [1]. These advancements have revolutionized the landscape of sales and transaction management for businesses across various industries.

The literature review conducted in this study (Ref. 2) delves deeply into the domain of intelligent POS systems, analyzing previous research endeavors and developmental initiatives [2]. It meticulously assesses the strengths and limitations of traditional POS systems, emphasizing the growing need for a new breed of smart POS solutions that are not only compact and mobile but also cost-effective [2]. Within this review, there is a comprehensive exploration of the extensive functionalities and capabilities intrinsic to smart POS systems [2]. These encompass a wide array of aspects, ranging from efficient inventory control to sophisticated sales analysis and robust customer relationship management tools.

In the retail sector particularly, there has been a pronounced surge in the adoption of intelligent POS systems in recent times (Ref. 3) [3]. These innovative solutions are purposefully designed to augment the overall customer experience by streamlining and expediting transactions, thereby enhancing customer satisfaction and loyalty [3].

The most recent phase of development in this trajectory introduces Hybrid POS applications, which come equipped with intelligent functionalities and seamless connectivity [3]. These Hybrid POS systems represent the latest evolution in the POS domain, aiming to amalgamate the best features of

different POS technologies to offer businesses enhanced operational efficiency and improved customer service [3].

Overall, the evolution from mechanical cash registers to modern, intelligent POS systems signifies a profound shift in how businesses manage their sales processes [1]. These advancements not only optimize operational efficiency but also significantly contribute to elevating the customer experience in the retail and broader commercial landscape [1].

III.   RESAECRH METHODOLOGY
IV.
a.   RESEARCH DESIGN:

This study follows a descriptive and analytical approach, aiming to investigate the transition from in-house POS systems to cloud-based solutions in the retail sector. It integrates both Field Observation and Site Visits to comprehensively understand the impact of this transition.

Objective: To gain first-hand insights into the existing in-house POS systems and server infrastructure used by retail businesses & identify the Problems & Provide the cloud based recommendation

Procedure:

- Site Selection: Selection of a diverse set of retail stores representing different sizes and operational scales.
- Preparation: Prior scheduling and coordination with store managers or IT personnel for the visit.
- Observation: Detailed observation of the in-house server setup, including hardware, network configuration, software installations, and data storage methods.
- Documentation: Taking notes, photographs (if permitted), and diagrams to capture the server architecture and configurations.

Data Collection during Site Visits:

- Technical Configuration: Understanding the hardware specifications (servers, networking equipment) and software systems in use (POS software, database systems).
- Infrastructure Layout: Documenting the physical layout of servers, networking setups, and any redundancy measures in place.
- Security Measures: Identifying security protocols, backup systems, and disaster recovery plans implemented by the stores.

Ethical Considerations during Site Visits:

- Permission: Obtaining permission from store authorities prior to documentation or photography.
- Confidentiality: Ensuring confidentiality of any sensitive information observed during the visits.
- Integration with Overall Research Methodology:
- The field observations and insights gained during these site visits will complement the qualitative and quantitative data collected through surveys and interviews.
- This hands-on understanding of the in-house server setups will provide a practical context to the challenges and limitations mentioned in the literature review and interviews.

Limitations of Site Visits:

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- The information gathered might be limited by the willingness of store managers to disclose details about their server infrastructure.
- Time constraints during store visits might limit the depth of analysis of server setups.

V. EXISTING SYSTEM
  a. Traditional Retail Management Process

Traditional retail establishments, sometimes known as brick-and-mortar businesses, have actual premises where customers may explore and buy products or services. [1][2]Here's an overview of how traditional retail stores work:

Store Layout and Merchandising: To create an engaging shopping experience, traditional retailers meticulously design the layout and visual presentation of their stores. Products are placed on shelves, racks, or display cases, which are frequently organized into categories or themes. Customers are attracted and certain items are promoted via visual merchandising strategies.

Inventory Management: Retailers keep a stock of merchandise on hand to meet client demand. To guarantee that products remain in stock, inventory levels are maintained and reorder points are established. This includes keeping track of product amounts, refilling shelves, and effectively controlling stock levels.

Point of Sale (POS) Systems: Retail stores utilize POS systems to expedite transactions. These systems are used by cashiers and sales staff to ring up items, calculate prices, receive payments (cash, credit cards, etc.), and issue receipts. POS systems also aid in the tracking of sales data and inventory management.

Customer service is an essential component of conventional retail. Sales assistants aid clients in locating products, answering inquiries, making recommendations, and giving a personalized shopping experience. Excellent customer service can lead to repeat business and loyal customers.

Visual Merchandising: Effective visual merchandising involves arranging products in an appealing and logical manner. Retailers use techniques like window displays, signage, lighting, and product placement to draw attention to specific items and create an engaging shopping atmosphere.

Promotions and Marketing: Traditional retailers often run marketing and promotional campaigns to attract customers. These may include advertising in newspapers, on radio or television, and through various in-store promotions such as sales, discounts, and loyalty programs.

Inventory Replenishment: Retailers regularly restock their inventory to ensure that popular products are always available to customers. This involves working with suppliers, wholesalers, and distributors to maintain a steady supply chain.

Store Operations: Store managers oversee day-to-day operations, including staff scheduling, inventory management, and ensuring compliance with company policies and procedures. They are responsible for store profitability and customer satisfaction.

Loss Prevention: Retailers implement loss prevention measures to reduce theft and fraud. This may include security cameras, anti-shoplifting devices, and training staff to be vigilant.

Payment Processing: Traditional retail stores accept various forms of payment, including cash, credit cards, debit cards, and mobile payment options. Payment processing systems securely handle transactions and provide customers with receipts.

Returns and Exchanges: Retailers have return and exchange policies to address customer concerns. These policies outline the conditions under which customers can return or exchange products and the associated processes.

Store Maintenance: Retailers maintain the physical condition of their stores, including cleanliness, organization, and repairs. A well-maintained store creates a positive impression on customers.

Traditional retail establishments face competition from e-commerce and internet purchasing, yet they remain an important part of the retail business. Successful brick-and-mortar stores frequently prioritize providing outstanding in-person shopping experiences, selling distinctive products, and adapting to changing consumer preferences and technological advances.
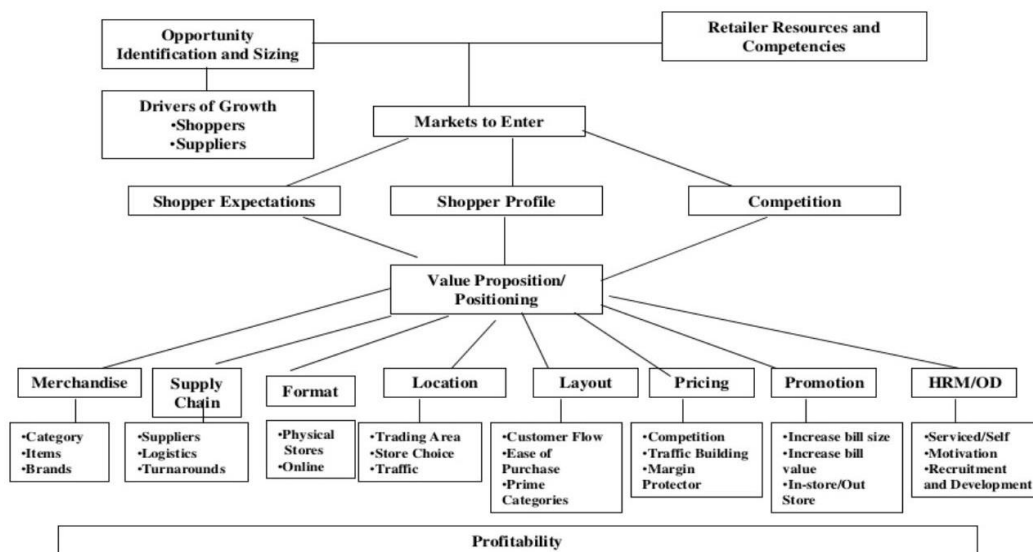
Retail Management Process

Ref: www.slideshare.net/jags009/chapter-6-retail-mgt

b. POS -RETAIL MANAGEMENT PROCESS

POS: Most of the retail stores implement POS for running the business, A Point of Sale (POS) system is a critical component of retail and hospitality businesses. It's used to facilitate transactions, record sales data, and manage various aspects of the business; most of the stores have on-premises Client Server Architecture to run the POS systems

POS systems accept the payments, keep track of sales and customers.[3]It is basically referred for cash registration at a store. This is a point where customers pay money to retailers on counter all the transactions are recorded and invoice is produced in return, some retail shops rely on cashier machines to record money transactions such as goods sold and cash earned. In today's modern era retailers are implementing new technologies to run the business efficiently.
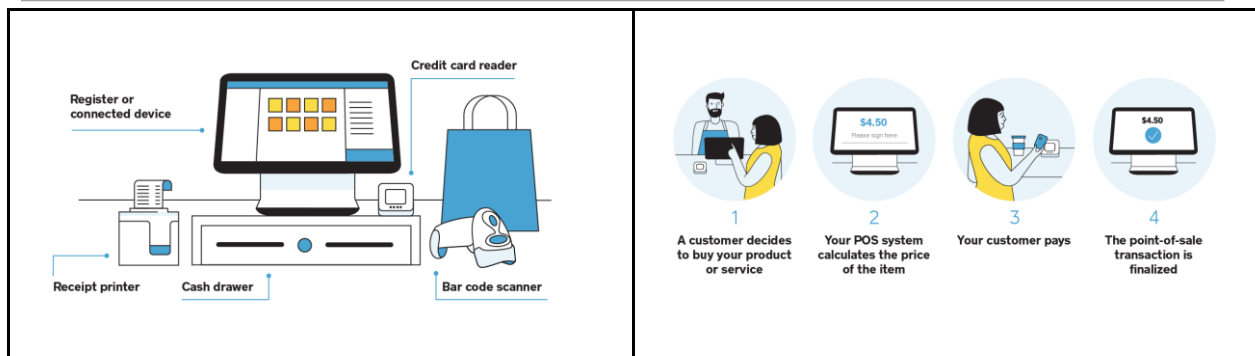
Fig 1 : POS Hardware & Software   Fig 2 : Working of POS

c.   ON-PREMISES / IN-HOUSE POINT OF SALE (POS) SYSTEM / SERVER BASED POS

Data is often saved and maintained on a local server within the business's physical location in an in-house or on-premises Point of Sale (POS) system. The first step is to create a new database on the local server. The database is intended to hold a variety of vital POS system information, including product descriptions, price, inventory levels, transaction history, customer profiles, and personnel records.[7]The entire POS system data is stored on the local server & accessed from the local server. The complete work relies on Local Server of the store, it is the only source of Backup for the data.

POS Software such as Retailware solutions comes with various functionalities such as Sales & Purchases management of the store, Scheme Management, Customer loyalty card, Barcode for correct billing, logistics & warehouse management, Role based access and multi user login, Re-order level & Re-order stock Management. Summary reports for Analysis, Mobile App Facilities, Supply Chain Management, GST Management, Billing & Inventory, Stock Management, Sales Return, Whatsapp Business Account Integration, Tally Integration (Export / Import Data), Reporting Analysis.

An in-house client-server POS system is a strong and dependable solution for firms that value control and security over their transactional processes. The POS software is installed and hosted locally within the business premises in this configuration. Several client devices, including as cash registers and tablets, communicate with a central server, which oversees the entire transaction process. This design enables real-time connectivity, quick data processing, and secures payment information management.

In-house client-server POS systems allow firms to modify the software to their own requirements, assuring a personalized approach to sales, inventory management, and reporting. Furthermore, this architecture reduces reliance on external internet connections, lowering downtime risks and enabling continued sales activities even when internet connectivity is unavailable.

POS systems are installed in local systems and local servers they can be accessed in local organizations to retain security and it also provides better integration with all the h/w devices in-house. They rely on LAN & use Client-Server Architecture. On-premises POS are purchased by the stores on License basis. They are preferred for more cash outlay and incur one-time cost investment for installation; training & they are user friendly.
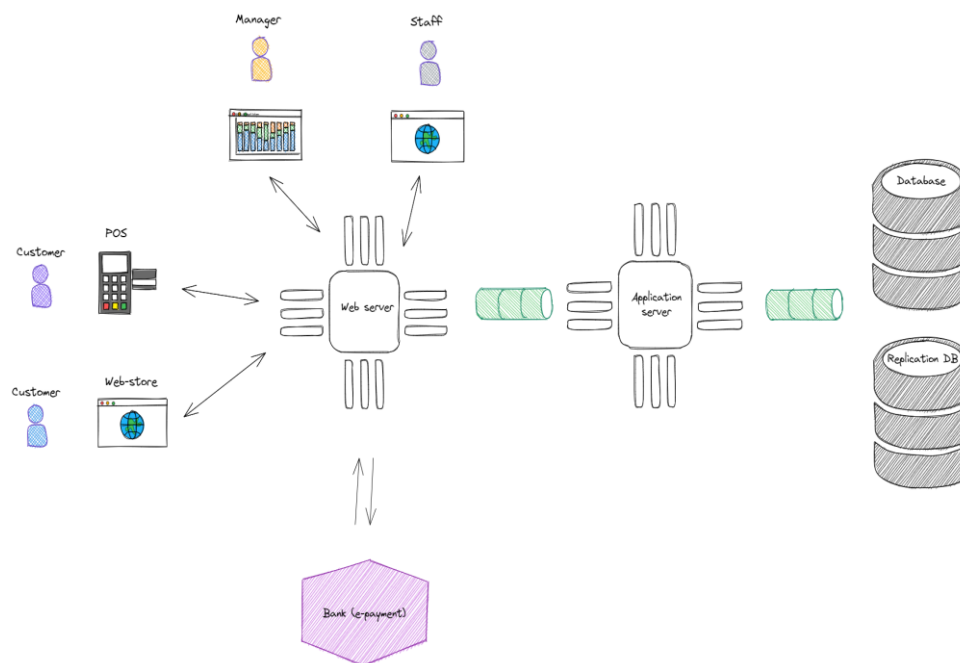
On-premises Data Management on local servers

While in-house local servers provide advantages in terms of control and security, they have certain limitations when utilized for retail data management they encounter few challenges in terms of below concepts

Problems Encountered in on-premises / in-house point of sale (POS) system / server based POS

Costs: Setting up and maintaining a local server in-house might be costly. Businesses must invest in server hardware, software licenses, and IT people to administer and maintain their systems on a continuous basis. This can be a substantial financial burden, especially for small enterprises.

Limited Scalability: Because in-house servers have limited capacity, scaling up to accommodate increasing data and transaction volumes might be difficult. Extending the server architecture frequently incurs additional expenses and complexities.

Overhead for Server Maintenance: Businesses are responsible for server maintenance, which includes software updates, security patches, and hardware repairs. This can waste time and resources while diverting attention away from vital business activity.

Vulnerabilities to Data protection: While in-house servers provide control over data protection, they also represent vulnerabilities if not adequately secured. To protect sensitive consumer and financial data, businesses must deploy comprehensive security measures such as firewalls, encryption, and access controls.

Limited Accessibility: Internal servers are only available at the company's physical location. This restricts remote access to data, which makes it difficult to oversee operations or retrieve vital information while off-site.

Downtimes: Hardware failures, power outages, and other technical problems might cause downtime on internal servers, which is a concern. Operations within a company may be disrupted, and missed sales opportunities may result.

Data Backups and Disaster Recovery: It's crucial to provide regular, secure data backups and to put a thorough disaster recovery plan into action. When these factors are neglected, data loss may occur during unforeseeable occurrences like natural catastrophes or cyber-attacks.

Complexity of IT Management: IT knowledge is necessary to manage an internal server. It may be difficult for small firms without dedicated IT professionals to maintain and successfully troubleshoot server-related issues.

Limited Mobility: Because in-house servers rely on a fixed physical infrastructure, they are not ideal for companies with mobile or distant sales operations.

Lack of Redundancy: With internal servers, achieving redundancy and high availability can be difficult and expensive. It frequently takes large expenditures in redundant hardware and backup solutions to ensure data continuity and minimal downtime.

Software Compatibility: Making sure the POS software and the server's operating system are compatible can be problematic. It's possible that either component will need careful testing and modifications after updates or changes.

In summary, while in-house local servers offer control and data security benefits, they also present challenges related to cost, scalability, maintenance, accessibility, and data resilience. Businesses need to carefully weigh these limitations against their specific needs and resources when deciding on their data management infrastructure.

VI.   PROPOSED CLOUD BASED SOLUTIONS

Cloud services [8] [9] have transformed the retail industry by offering flexible deployment models to cater to diverse needs. Public clouds provide retailers with scalable and cost-effective solutions for tasks such as web hosting and customer analytics, enabling them to adapt quickly to market demands. Private clouds, on the other hand, empower retailers with enhanced control and data security, making them ideal for handling sensitive customer information and complying with strict regulations. Hybrid clouds combine the best of both worlds, allowing retailers to leverage the cost-efficiency of public clouds for seasonal peaks in demand while maintaining the security of private clouds for core operations. These cloud deployment models enable retailers to optimize their IT infrastructure, streamline operations, and provide agile customer experiences in a dynamic marketplace.[10] The below diagram represents the cloud working in various deployment models.

Cloud Based Architecture
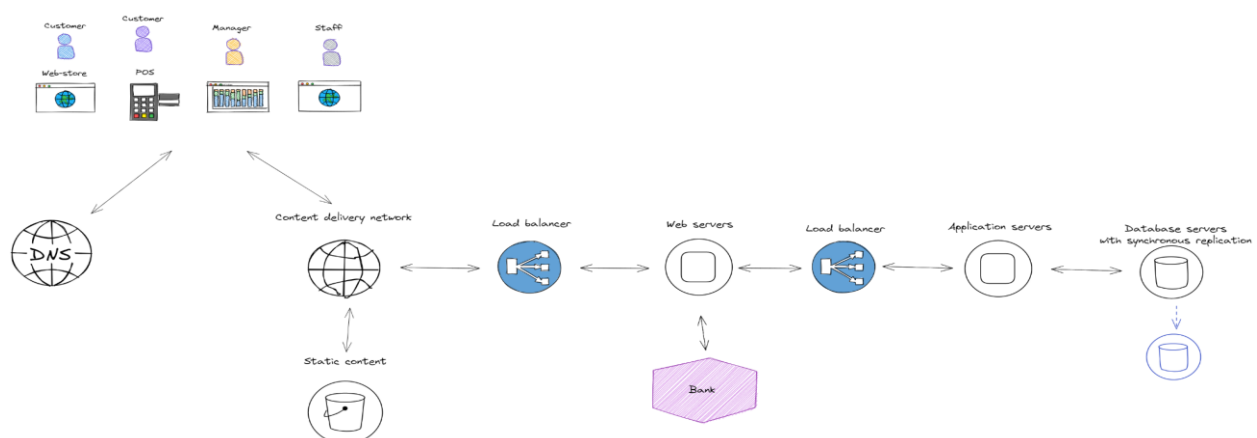
HYBRID POS (CLOUD BASED POS)

A Cloud-Based Point of Sale (POS) [8] system is a cutting-edge retail management solution that uses the cloud to streamline operations and sales. It overcomes all the limitations of maintaining the data in-house local server. Retailers who use cloud-based POS systems can use their POS system from any location that has an internet connection, in contrast to traditional local server-based POS systems, which run totally in the cloud. Businesses with various sites or those wishing to offer remote management may find this flexibility to be very beneficial.
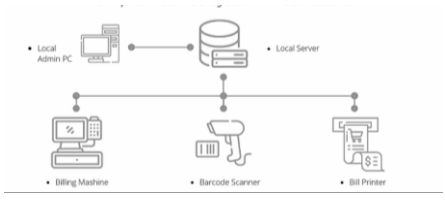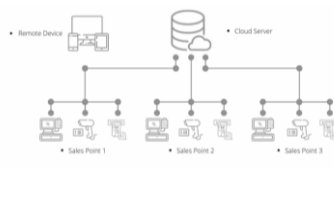
A cloud point of sale (POS), [11] which can be either cloud-based or cloud-hosted, is an improved version of the conventional POS system. In the first case, the point-of-sale (POS) system is designed specifically for a cloud environment and runs on a subscription-based business model known as Software as a Service (SaaS).In the second case, the Point of Sale system was initially installed on-site and is frequently custom-developed. However, all crucial business information is safely kept on distant servers that are normally handled by either an internal IT team or an external vendor. In either scenario, employees benefit from having seamless access to important data via a range of devices, including PCs, cellphones, laptops, and more, encouraging increased mobility and flexibility.

Real-time inventory management, sales analytics, and remote administration of store operations are all features of cloud-based point of sale systems. They give companies the flexibility to quickly scale up or down to meet shifting demand, which makes them economical and adaptable. Data is more secure than on the local server.

Square, Shopify, Lightspeed, and Vend [12] are well-known suppliers of cloud-based POS solutions; they provide a variety of features catered to different retail industries. These solutions make it easier for retailers to focus on providing excellent customer experiences and expanding their businesses by streamlining operations like sales processing, inventory keeping, customer management, and reporting.

In the first instance, In-house POS the data is stored on a server that is housed inside the company's walls. Only computers or other devices that are directly linked to the server are able to access such data. The cloud POS system allows you simple data access on any device and is portable. Data is kept on distant servers (in the cloud). Users frequently compare these POS systems in an effort to locate the ideal option without drawbacks. It is referred to as a hybrid POS and already exists.

Features	In- house POS	Cloud Based POS
Access	Data can be accessed by the clients & devices connected to the server through the network	Data can be accessed from the cloud through internet on any device
Data Storage	Data is stored in the premises databases & servers	Data is stored in the Cloud server
vulnerability	Data is more open for attacks through malware or due to any damages caused to the local server	Data is stored on multiple servers & has regular backups & it is more secure compared to in -house POS

Cost -maintenance	Upfront cost are high & low maintenance cost	Low upfront cost but the subscription costs relies on the data & service
Updates	Updates are carried out manually over period of times	Regular updates happen automatically
Architecture		

Benefits of Cloud –based POS

Cloud-based POS [10] offers numerous advantages over traditional in-house POS server solutions, making them a popular alternative for modern retailers. First and first, scalability is critical. Businesses can smoothly expand and react to fluctuating demands with cloud solutions, eliminating the need for substantial investments in hardware upgrades. Whether it's adding new locations or diversifying product offerings, the cloud gives businesses the flexibility they need to meet changing market demands.

Another strong advantage is cost-effectiveness. When opposed to the significant expenditures associated with maintaining physical servers, cloud solutions can demand lesser upfront costs. Cloud service providers' subscription-based or pay-as-you-go pricing models further cut operational expenses, allowing organizations to spend resources more effectively. Furthermore, the cloud's availability provides retailers with remote management possibilities. The ability to access retail data and management tools in real time from any location with an internet connection improves decision-making, inventory management, and sales tracking, allowing firms to remain competitive in today's fast-paced retail industry.

Additionally, [9] cloud retail management systems place a premium on automatic updates and data security. Service providers update their solutions on a regular basis, ensuring access to the most recent features, security patches, and compliance standards. This reduces the need for time-consuming manual updates and helps to keep system downtime to a minimum. Cloud companies invest heavily in comprehensive security measures, often exceeding the capabilities of many individual firms. The risk of data loss due to hardware failures or unforeseen occurrences is considerably reduced when data is housed in secure data centers and thorough backup and disaster recovery strategies are in place. Finally, the inherent compatibility and ease of integration of cloud systems with other business applications and services streamline internal processes and foster collaboration between departments and external partners, improving overall operational efficiency and competitiveness in the retail landscape.
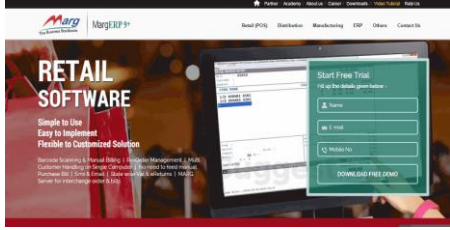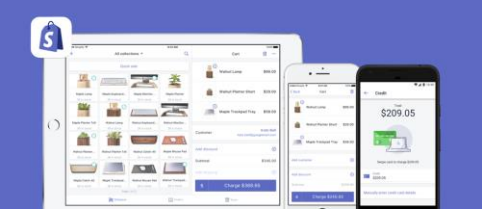
The key features offered by most of the Cloud based POS companies

Inventory Management, Accounting and Financial Management, Sales and Distribution Management, Purchase and Procurement Management, Production and Manufacturing, Point-of-Sale (POS) and Retail Management, GST (Goods and Services Tax) Compliance, Payroll and HR Management, E-commerce Integration, Barcode Integration, Mobile Applications, Cloud-Based Services, Customer

Relationship Management (CRM), Supplier Relationship Management (SRM), Multi-Location Support, Multi-Currency Support, Data Security and Backup, Customizable Reports and Dashboards, Bill of Materials (BOM) Management, Quality Control, Employee Attendance and Leave Management, Financial Reporting and Analysis, Vendor Management, Service and Maintenance Management, Document Management and Printing, Data Import and Export, Consulting and Support Services These features are designed to help businesses manage their operations, finances, inventory, and sales efficiently while ensuring compliance with taxation and regulatory requirements in India.

Specifications: *Deployment*: on-premises, Supports*: Desktop & Mobile Platform for Windows, Android & Mac OS

Few Companies offering Cloud POS /Hybrid POS

Marg ERP Ltd	MARG Retail Software is designed to handle all the needs of the individual shop or retail chain in a very efficient, effective and accurate way. Retail Billing Software is feature rich software with highly flexible configurations.
Square	Popular with small and medium-sized retailers. It provides a range of hardware options, including point-of-sale terminals, tablets, and mobile card readers. Features: inventory management, sales reporting, and contactless payments.
Shopify POS	Retailers who have both physical stores and online sales channels can use Shopify's cloud-based POS system. It effortlessly interacts with the e-commerce platform of Shopify, enabling centralized inventory management, multi-channel selling, and customized receipts.
	Lightspeed provides cloud-based point of sale (POS) solutions made for different kinds of shops, like restaurants and e-commerce companies. It offers a full range of capabilities, such as customer profiles, inventory monitoring, and sales reporting, for both front-of-house and back-office operations.

CONCLUSION

Cloud-powered retail management has established itself as an essential component of the contemporary retail environment. Retailers can benefit from cloud computing's unmatched scalability, cost-effectiveness, flexibility, and accessibility. Retailers may better respond to shifting market conditions, improve customer experiences, and spur corporate growth by implementing cloud-based POS systems, whether in a hybrid or pure cloud environment. Traditional retail management procedures have their advantages, but they cannot compete with cloud technology's agility and creativity. Adopting cloud solutions will be essential for the retail sector's continued evolution if it is to remain competitive and satisfy the constantly changing demands of modern consumers.

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A Study of Tax Saving Investment Pattern (80C) of Salaried Persons in Kolhapur City

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Abstract:

Tax planning is a necessary part of our financial planning. Efficient tax planning enables us to reduce our tax liability to the minimum. It can be done by legally taking advantage of all tax exemptions, deductions, rebates and allowances while ensuring that the investments align with their long-term goals (Gautam, 2013). The study is planned to find out the most suitable and popular tax-saving instrument used to save tax. Also, to examine the amount saved by using the selected instrument.

Tax planning is the arrangement of one's concerns so that the tax planner may either reduce tax wholly or reduce it to the maximum possible extent as may be permissible within the framework of the taxation rules. It does not amount to evasion of tax. It is an act of caution and vision on the taxpayer's part, which is entitled to reduce the burden of his tax liability to the maximum possible extent under the existing law (Gautam, 2013). Tax planning ensures not only accruals of tax benefits within the four corners of the law but also that the tax obligations are correctly discharged to avoid penal provision.

The respondents of the study consist of people having fixed salaried income in Kolhapur City. The Investment pattern of salaried person differs from that of professionals and business people due to safety, regular flow of income security and retirement benefits.

Key Words: **Tax Planning, Financial Planning, Investment, Long-Term Goals, Salaried.**

1.1 Introduction:

The factors considered in investment are securities as well as higher returns. There are two main types of factors that have driven returns of stocks, bonds, and other factors: macroeconomic and style factors. Think of the various types of investments as tools that can help to achieve the financial goals. Each broad investment type, from bank products to stocks and bonds, has its own general set of features, risk factors and ways investors can use them.

Investing money can allow it to grow. Most investment instruments, such as stocks, certificates of deposit, or bonds, offer returns on money over the long term. This return allows money to build wealth over time.

The money earned is not infinite, and whatever measures can be taken should be applied to ensure income stays in the pockets.

Many investors start investing just near the end of a financial year. It is a wrong decision by the investor. It has two implications:

1. Firstly, the investor will end up investing money without proper planning.
2. Secondly, the investor will lose interest/appreciation for the entire year.

Therefore, the investor should evaluate different investment options carefully before making an investment decision and should start investing right from the beginning of a financial year, that is, from April. It will have two implications:

✓ Firstly, it will enable the investor to make informed decisions.

✓ Secondly, the investor will earn the interest on investments for the entire year from April to March.

a. Theoretical Background

Tax planning is a necessary part in setting financial goals. Efficient tax planning helps us to reduce our tax liability. It is done legally by taking advantage of all tax exemptions while ensuring that investments align with long-term goals. The purpose of the study is to find out the most suitable and popular tax-saving (Gautam, 2013) instrument used by salaried persons to save tax.

b. Salaried Investors:

The respondents of the study consist of people having fixed salaried income in Kolhapur City. The Investment pattern of salaried person differs from that of professionals and business people due to safety, regular flow of income security and retirement benefits.

c. Tax Planning:

Tax planning is the arrangement of one's concerns. The tax planner may either reduce tax wholly or reduce it to the maximum possible extent. It is an act of caution and vision on the taxpayer's part, under the existing laws of India. Tax planning ensures not only increase of tax benefits but also that the tax obligations are correctly discharged to avoid penal provision. (Gautam, 2013)

The Popular Investment Options

✓ Public Provident Fund, Provident Fund
✓ Insurance policies, Unit-linked insurance.
✓ Equity-linked saving schemes.
✓ National Saving Certificates, Infrastructure bonds

1.2 Significance of the study

It is advisable to plan the investment in order to avoid last-minute hassles. In case investors are unable to invest in the right products, they would have to pay the entire tax depending on their income. The study will help salaried persons in tax planning, minimizing tax payments, and maximizing their savings.

As salaried employees have a fixed income, their investment patterns are also different. In connection with this, a study is made to determine the investment behaviour of investors in Kolhapur City. It will be helpful to understand the investment preferences of salaried investors. The current study will also highlight the awareness of the investment opportunities available in India.

1.3 Objective of the Study

1. To study the tax payer awareness about filing the income tax return,
2. To study the tax payer awareness about standard deduction U/S 80 C,
3. To identify the investment pattern of salaried persons,
4. To make the salaried person aware of investments for Income tax exemption,

1.4 Hypothesis of the Study

1. Ho: There is no relation between gender and awareness about income tax.
   H1: There is a relation between gender and awareness about income tax

2. Ho: There is no association between income level and e-filing the return.

H1: There is an association between income level and e-filing the return.

1.5 Research Methodology

Kolhapur is a city situated in the southwest part of the state of Maharashtra, India. Kolhapur serves as the headquarters of the Kolhapur district. As of the 2011 India census, Kolhapur Urban Agglomeration had a population of 561,841, whereas the city had 549,293, making it the 78th most populous city in India. In this population, males constitute 287,376, and females constitute 274,465, resulting in a sex ratio 955. Kolhapur has an average literacy rate of 92.17%, higher than the national average of 59.5%. Presently, Kolhapur has become a very famous tourist attraction, industrial hub and educational hub.

The study is descriptive because it highlights the relationship between age groups and income level on tax saving amount.

a. Sources of Data Collection

The primary data is collected through a questionnaire method by circulating Google Forms in the presence of various salaried persons in Kolhapur city.

The secondary data related to the literature review, theoretical background, and conceptual data are collected by visiting the Library and refereeing articles and research papers related to our study. Also, by visiting the income tax website of the Indian Government, all the Tax Savings Instruments are collected.

b. Sampling

The sample size was planned to be 50. The snowball sampling technique is used to select a sample of 50 salaried persons using Google Forms. As the primary data is collected through Google form, the data of the first 50 respondents are considered for data analysis.

c. Scope of the Study

The data is collected from salaried persons of Kolhapur City. Therefore, scope of the study is limited to Kolhapur city only.

1.6 Limitations of the Study

1. The present study is limited to a survey of only salaried persons.
2. The study is applied in nature. The findings emerging from the analysis are helpful to tax planning of salaried persons only.
3. In the present study, deductions U/S 80C are only considered.

2 Data Analysis & Interpretation

The data of 50 respondents is analyzed in the following various tables.

2.1 Service Sector-Wise Distribution of Respondent

The X-axis represents the Service sector of respondents, while the Y-axis represents number of respondents. 30 % of respondents are from the Educational Sector, 18 % are from the Industrial Sector, and the highest 38 % are from another sector.
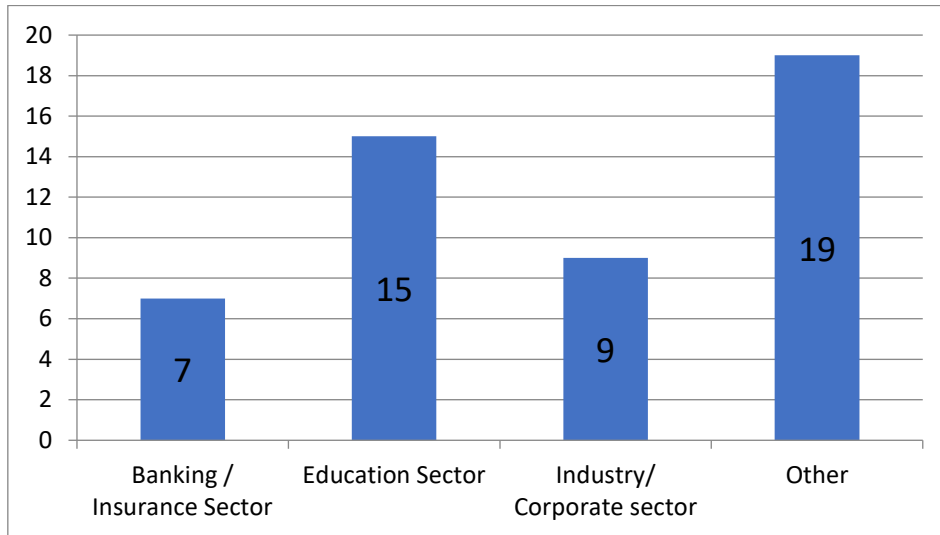
2.2 Awareness about Income Tax Calculation
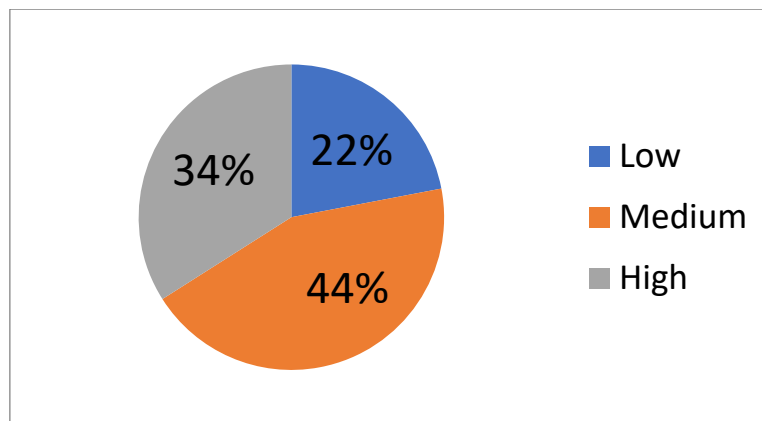
From the diagram, 44 % respondents say that they have high awareness about income tax while 34% have medium, and only 22 % of respondents feel that they have low awareness about income tax.

2.3 Awareness about Income Tax Savings Instruments under Chapter VI A/ 80 C
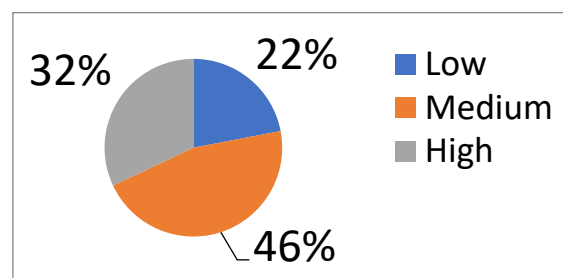
From the diagram, 46 % say that they have high knowledge about tax savings instruments, while 32 % have medium. Only 22 % of respondents feel they need more awareness about tax savings instruments.

2.4 Factors Influencing on Tax Savings Investment

Influencing Factors	# of Respondent	Percentage
Liquidity	6	12
Safety	28	56
Tax Exemption Benefits	16	32
Total	**50**	**100**

56% of respondents are investing for future safety while 32 % are investing to get only tax exemption benefits. The remaining 12 % are investing for liquidity.

2.5 Factors Influencing on Investment

Objective of Investment	# of Respondent	Percentage
Future Goals	29	30.21
Security	29	30.21
Retirement	16	16.67
Tax Benefits	16	16.67
Emergency	6	6.25
Total	**96**	**100**

Note: Since some respondents have mentioned more than one response, the responses outnumbered the respondents.

The above table shows that 30.21 % respondents are investing their money in particular for safety and to achieve their future goals. 16.67 % respondents invest their money in tax-saving schemes to secure retirement. Another 6.25 % respondents invest their money for emergencies.

2.7 Selection of Tax Savings Instrument

Instrument	# of Respondent
Life Insurance	44
PPF	27
NSC	8
Housing Loans	6

NPS	6
ELSS	5
ULIP	4
Total	**100**

Note: Since some respondents have mentioned more than one response, the responses outnumbered the respondents.

The above table shows that 44 % invest their money in Life Insurance for Tax Savings. 27 % invest their money in the tax saving scheme of PPF – Public Provident Fund, and the remaining 8%, 6%, 6%, 5%, and 4 % of respondents invest in NSC, Housing Loans, NPS, ELSS and ULIP.

2.6 Preferred Tax Savings Instruments

Type	Very Low (1)	Low (2)	Neutral (3)	High (4)	Strong (5)	Weighted Average	Rank
Life Insurance	1	5	14	14	16	3.78	**I**
PPF	6	5	19	12	8	3.22	**II**
Housing Loans	9	7	16	7	11	3.08	**III**
NPS	10	5	19	9	7	2.96	**IV**
NSC	10	12	16	9	3	2.66	**V**
ELSS	10	12	17	8	3	2.64	**VI**
ULIP	10	23	10	7	0	2.28	**VII**

Source: Primary Data Collected

The respondents preferred life insurance as the best tax-saving instrument and ranked it first. Provident fund is the second highest rank tax saving instrument, while Home Loans ranked as third. The National Pension Scheme is the fourth highest preferred tax saving instrument. National Saving Certificates ranked fifth. Respondents preferred ELSS as the sixth and ULIP as the seventh.

2.7 Hypothesis of the Study:

Ho: There is no relation between gender and awareness about income tax.

H1: There is a relation between gender and awareness about income tax.

	Awareness about Income Tax	Total

		Low	Medium	High	
Gender of Respondent	Female	5	10	5	**20**
	Male	6	12	12	**30**
Total		**11**	**22**	**17**	**50**

Observed Frequency Of	Expected Frequency Ef	$\dfrac{(Of - Ef)^2}{Ef}$
5	4	0.2500
10	9	0.1111
5	7	0.5714
6	6	0.0000
12	13	0.0769
12	10	0.4000
$\chi^2 =$		**1.4095**

Degrees of Freedom = (r -1) x (c – 1) = (2 -1) x (3 -1) = 2 **Hence, $\chi^2_{0.05, 2}$= 5.99**

As the calculated Chi-square value is less than the table value at a 5 % significance level, we accept the null hypothesis.

Conclusion: The hypotheses "There is no relation between gender and awareness about income tax." is accepted.

Hypothesis of the Study:

Ho: There is no association between income level and e-filing the return.

H1: There is an association between income level and e-filing the return.

		e-filing the return		Total
		Self	Other	
Income Level	Up to 500,000	15	5	**20**
	500,001 to 1000,000	9	9	**18**
	More than 1000,000	10	2	**12**
Total		**34**	**16**	**50**

Observed Frequency Of	Expected Frequency Ef	$\dfrac{(Of - Ef)^2}{Ef}$
15	14	0.0714
5	6	0.1667
9	12	0.7500
9	6	1.5000
10	8	0.5000
2	4	1.0000
	$\chi^2 =$	**3.9881**

Degrees of Freedom = (r -1) x (c – 1) = (2 -1) x (2 -1) = 1 **Hence, $\chi^2_{0.05, 1}$= 3.84**

As the calculated Chi-square value is greater than the table value at a 5 % level of significance, the evidence is not enough to accept the null hypothesis.

Conclusion: The hypotheses "There is an association between income level and e-filling the return." Is accepted

3. Findings:
1. In the study, the student investigated 50 salaried respondents of Kolhapur City, and it reveals that 52 % of investors are aware of filing income tax returns by themselves while the remaining 48 % are filing by taking the help of Financial Advisers, Friends or relatives.
2. 78 % of are using different Tax Savings Avenues, whereas 22 % of respondents need knowledge.
3. Safety is the primary factor while making tax savings investments, as 56 % are investing their money by considering safety.
4. 50 % make tax savings investments up to Rs. 50,000.
5. The main objectives of investors are to fulfill future goals/security, followed by retirement planning, as percentages are 60.42 % and 16.67 %, respectively.
6. Insurance investment got the first rank in this study. The second tax-saving instrument is the PPF. The third choice is Housing Loans. After that, National Pension Scheme, National Saving certificates, ELSS and ULIPs.
7. The student used the 'Chi-Square' method for hypothesis testing and found that "There is no relation between gender and awareness about income tax."
8. The student used the 'Chi-Square' method for hypothesis testing and found that "There is an association between income level and e-filling the return."

Suggestion:
1. Only 50 % are investing in tax savings instruments. The government should plan to create awareness and benefits of investing in tax savings instruments.
2. From the analysis, Life Insurance and PPF are at the first and second rank for Tax Savings. So SEBI and AMC Fund Houses should plan for creating awareness towards ULIP Plans and ELSS Plans and how these tax savings instruments are more beneficial as compared to traditional LIC & PPF with certain risks on investment.

3. Also, it is observed that up to the age of 45, the tax savings investment is less. So, the government should create awareness among young salaried persons for investing in tax savings instruments to secure their future. If they start investing from early stage of their jobs, at the time of retirement, they will get a good return.

4. It is observed that 52 % of respondents are self-filing their tax returns, while 48 % of respondents are filing by taking help from others. Filing tax returns is easy and self-explanatory, so the government should motivate a salaried person to file their returns themselves.

Conclusion:

Today, the living standard of the people is increasing daily, so the salaried class community has started realizing the importance of tax savings instruments and proper investment of their savings. They avoid spending money on a luxurious lifestyle and prefer the average living standard. The study on preferred tax savings investment avenues among salaried people has been undertaken with critical objectives such as finding preferred tax savings investment avenues and also knowing the awareness level of investors. Analysis of the study was undertaken with the help of a survey conducted. After the analysis and interpretation of data, it is concluded that Investors are aware of investment avenues available in India, but still, investors prefer to invest in Life Insurance and public Provident Fund schemes at large. The data analysis reveals that safety is an essential factor while investing. Hence, it concluded that most salaried persons prefer secured regular income on investment in Kolhapur City.

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Service Quality and Customer Satisfaction among public road transport passengers: Study on Literature Review

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Abstract*:* Future economic growth of a developing country like India depends on the efficiency of its transportation system. Meeting the needs of individuals or groups with an interest in the organization is part of providing public services, as defined by the organization's laws and regulations. Passenger perception and satisfaction are interconnected. The appraisal a user makes of a service after utilizing it in light of his expectations and prior experiences is known as the user's perception. People choose, organize, and analyse data to form an accurate picture of the outside world. Tactics for raising the level of service in public transportation as well as strategies for boosting customer perception and satisfaction. The guiding concept focuses a strong emphasis on the SERVQUAL theory, associated research on customer satisfaction and service quality, service quality, customer expectations, and customer satisfaction. A descriptive methodology was used in the study, which also reviewed some of the studies on customer perception and satisfaction as well as methods for raising the standard of service in public transportation.

Key words - Satisfaction, Service Quality, SERVQUAL

1. **Introduction**

Transportation has a significant impact on both the standard of living for people and the economy of any country. Business, agriculture, and the service sector cannot survive without it. It makes it easier to move people and objects from one location to another. Future economic growth of a developing country like India depends on the efficiency of its transportation system. Meeting the needs of individuals or groups with an interest in the organization is part of providing public services, as defined by the organization's laws and regulations.

A user's appraisal of a service after utilizing it and comparing it to what he had previously anticipated and experienced is known as customer perception. People choose, organize, and analyze data to form an accurate picture of the outside world. Consumer perceptions of service quality have been the subject of extensive academic study, and the results show that these perceptions are favorably correlated with brand perception and customer satisfaction. (Truong, et al., 2017; Barber, et al., 2011; Marinkovic, et al., 2014).

Service Quality: The performance, or profitability, of the service sector is thought to be significantly influenced by service quality. Service excellence both lures new clients away from rival businesses and encourages clients to make repeat purchases (Venetis & Ghauri, 2002; Wantara, 2015).

2. **LITERATURE REVIEW**:

2.1 Customer Satisfaction towards Services Quality of Public Transportation By Thian Wan Jun:

He studies customer happiness in his article in relation to the quality of the public transportation service. SERVQUAL was used as a tool to gauge customer satisfaction across five aspects. This study identifies

the most important factors that result in great service quality. In this study, 200 sets of questionnaires were distributed to participants, and 80 percent of those sets were returned. Descriptive statistics, Pearson correlation, and multiple linear regressions were used to analyze the data in this study. The five SERVQUAL components in this study exhibit a positive link with customer satisfaction, according to Pearson Correlation. However, to predict how the independent variable might impact the dependent variable, multiple linear regressions are used.

2.2 Measuring the Satisfaction of Multimodal Travellers for Local Transit Services in Different Urban Contexts: Marco Diana:

Beyond more direct marketing goals, it should go without saying that a public transportation service needs to assess consumer happiness. This study intends to demonstrate the usefulness of using satisfaction measurements to understand the interplay between human attitudes, transportation use, and the urban environment. An Italian multimodal sample of travelers (those who use both private vehicles and public transportation) revealed nine indicators of urban transportation system satisfaction. Researchers used correlations and correspondence studies to demonstrate if and how each feature is related to levels of use of public transportation as well as how the urban environment affects the relationship.

2.3 What Influences Satisfaction and Loyalty In Public Transport? A Review Of The Literature: Dea van Lierop, Madhav G. Badami & Ahmed M. El-Geneidy

For many communities, keeping transportation patrons on board is a difficult task. Developing comprehensive policies aimed at retaining passengers necessitates a thorough understanding of the factors within public transportation that impact users' loyalty to the system. The literature on the factors influencing use of and satisfaction with public transportation is summarized in this essay. The results of the research show that on-board comfort and cleanliness, operator friendliness and assistance, safety, punctuality, and frequency of service are the service aspects most closely connected with happiness. Passengers' impressions of value for money, on-board cleanliness and safety, interactions with workers, and the reputation and dedication of public transportation are all tied to loyalty.

2.4 Perception Of Public Transport Quality Of Service Among Regular Private Vehicle Users In Madrid, Spain: Juan de Oña, Esperanza Estévez, Rocío de Oña:

Using public transportation instead of a private automobile can ease traffic in urban areas. To achieve this modal shift, one might either restrict the usage of personal vehicles or take steps to improve people's contentment with public transit. Numerous research have shown that customer satisfaction, which affects behavior toward the service, is influenced by a service's quality; nevertheless, the majority of these studies have mostly focused on users of public transportation. The goal of this study is to pinpoint the important factors that influence how private vehicle owners perceive Madrid's public transportation systems in Spain. A sample of 500 frequent users of private vehicles was used in an online panel poll to test the ordinal logic models.

The findings show that individuals in Madrid are content with public transportation, with regularity, speed, and intra-modality ranking as the three most crucial factors for those who use private vehicles. High frequency is a requirement for all segments, but the majority also call for high speed and multimodality. A segment analysis has shown traits that, while not typically remarkable, are important for specific segments. Another interesting finding was that two criteria (accessibility and individual space) were not found to be important in any segment. The findings of this study can be utilized to create plans and suggestions for getting more people to give up their cars and use the bus or train instead.2.5

Modeling The Satisfaction Of Bus Traffic Transfer Service Quality At A High-Speed Railway Station: Xiaoyun Cheng,[1] Yu Cao,[2] Kun Huang,[1] and Yuejiao Wang[1]

2.5 Students 'expectations of service qualitytowards higher education services. **(Gupta, 2016):**

The analysis is based on a Rust and Oliver (1994) three-component service quality model. The survey evaluated the perceived effectiveness of various institutional-student interfaces, including the placement office, library, computer labs, faculty/school offices, proctor's office, dormitory, sports complex, and health center. The purpose of the study was to determine whether student perceptions of service quality parameters in relation to various facets of higher education, specifically technological quality, functional quality, and environmental quality, vary depending on factors such as gender, educational setting, context, and household income.

To confirm the relationship mentioned Students were asked to rate the claims on a scale of 1 to 5 using a list of 22 items in the Likert style. With the use of the T-test, chi-square test, and F-test, further data were evaluated. The study's findings indicated that there are significant differences in how different demographic characteristics understand service quality. The study also provided information on the aspects of service quality that have the biggest an impact on patronage and satisfaction among students.

2.6: "Service Quality Perception of Customers about Insurance Companies: **An Empirical Study."**

Gautam Vikas (2012)"

The SERVQUAL / SERVPERF paradigm, which focuses on the distinction between perceived and planned service quality, is the subject of this study. In the insurance industry, specifically in the public sector of LIC and the private sector of ICICI Pru, this study tries to establish the characteristics of service quality. The five qualities of tangibility, efficiency, responsiveness, assurance, and empathy are used to calculate service quality. There are just 22 things on the scale. At 210, the sample size is large. The LIC and ICICI Pru were found to have reliability for the construction of 0.966 and 0.956, respectively. To determine whether the data received was consistent with the suggested framework, exploratory factor analysis was conducted. To relate the SERVPERF dimensional values to the overall perception of customer service, a multiple regression equation was created. The T-test demonstrates that there is a discrepancy between how effectively insurance companies are perceived to provide customer service in the public and private sectors. The conclusion shows that ICICI Pru is more competent and concrete than LIC. LIC is more efficient, self-assured, and kind than ICICI Pru. Both receive almost the same amount of response.

2.7 : PhadkeSuniti (2016)"Consequences Of Service Quality Linkage- Finding out the relationship trends between the four variables service quality (SQ), overall service quality (OSQ), overall student satisfaction (SAT), and behavioral intention (BI) in the Indian educational system is the main goal of this study. 237 students who are enrolled in a higher education program in Bangalore provided the data. The scale of item 46 was utilized to compute the variables in this analysis. The target groups received a structured questionnaire. All three of the constructions (SQ, OSAT, and BI) have Cronbach's alpha values above 0.70, and OSQ has values above 0.95. After fitting a simultaneous equation with the structural equation model (SEM), the hypothesis testing was carried out. The outcome shows that the level of service has a significant and significant impact on overall student satisfaction. Overall, behavior strength is influenced by student satisfaction. Students who are happy with their educational experience spread the word about the university and engage in good word-of-mouth. The overall standard of service has had a positive impact on behavioral intent. Overall satisfaction among students has positively affected the global evaluation of students.

2.8 Manish Gupta (2016): The three-part service quality model proposed by Rust and Oliver (1994) was used in this study to examine students' expectations of service quality in higher education systems. Through a variety of interfaces, including placement cells, libraries, computer laboratories, faculty/school offices, proctor offices, hostels, etc., they also tried to analyze the perceived level of service. The study's findings showed how students evaluated the quality of the services. Furthermore, the study provided insights into the aspects of service quality that have the biggest an impact on customer satisfaction and loyalty. It also demonstrated the significant variance in service quality expectations across various demographic factors.(1992; Cronin & Taylor)

2.9 The paper by Siva Kumar K (2014) and others adds to the body of literature by examining how patterns of service delivery affect how customers perceive the quality of the services they receive. To better understand the linkages between service failures/delights delivery patterns and expectations of service quantities, the authors established a conceptual model built on notions of mental accounting taken from prospect theory. They also produced a number of research recommendations. The analysis integrates prospect theory with customer experience research and provides a methodical, theory-driven arena for examining the effects of different customer failures and delightful delivery methods. In order to maximize joy gains and minimize failure losses, this has important operational implications for resource management and service design, including where, how frequently, close together, and in what order delights and failures will occur. [Siva Kumar K et. al (2014); "Service Quality: The Impact of Frequency, Timing,Proximity, and Sequence of Failures and Delights". Journal of Marketing Vol. 78 Jan 2014 p. 41-50]

2.10   Musa KasuwarKukaGambo :

In his study, the author looked into the connection between airline quality of service and airline passengers' happiness in domestic flights within Nigeria. The study employed a quantitative approach with a cross-sectional survey and a closed-ended self-completion questionnaire. The questionnaire was created using a modified SERVQUAL model that incorporated five service quality criteria, including luggage handling, check-in procedures, in-flight amenities, reliability, and responsiveness. The following options were utilized on a Likert scale with a maximum of five points: much better than expected, better than expected, just as expected, worse than expected, and much worse than expected. Five separate scores were given for each option, ranging from 5 to 1, in that sequence. A sample of 400 respondents was selected using stratified random sampling procedures. The questionnaire were administered to the respondents respectively at the Lagos, Abuja and Kano airports arrival and departure lounge in Nigeria.

3.0 Research Gap:

The frequently researched categories, as determined by the structure of quality attribute categories, include cost, availability, time, and comfort, all of which are addressed in over half of the studies reviewed. Availability emerges as the most extensively researched area, particularly concerning networks (coordination, transfers, access, and egress) and modalities (bus vs. train). On the operational side of availability, including working hours and frequency, there are no specifics. The reliability in the time category has been the main focus of the investigations under review. There are no explanations of trip time, such as studies on the reduction of travel time in local public transit. While some publications highlight characteristics like accessibility, information, customer service, security, and environmental impact, they don't go into detail.

4.0 DISCUSSION: Numerous conclusions from this analysis are suggestive rather than definitive due to the dearth of prior research on the topic. The different methodologies used and variables taken into

account in the reviewed studies further hinders the ability to make conclusive conclusions. However, the study provides a summary of high-quality research in regional public transportation and identifies a number of quality characteristics that have consistently been found to be crucial in these studies. It's significant to note that the studies under consideration use quality criteria differently in terms of definition and application. This makes evaluation more challenging, but by modifying the technique outlined in Section Service quality attributes, we were able to compare research and identify some broad trends.

5. CONCLUSION:

By examining the many pieces of literature that are currently available, we can draw the conclusion that people prefer to travel by public transportation in both urban and rural areas of the world owing to rising fuel prices and air pollution. Public transportation could benefit from making services more accessible. In order to increase consumer happiness, the functional aspect needs to be given more consideration. Frequency, cost, punctuality, and trip time are the primary characteristics that influence a higher level of satisfaction. Finding out what the consumer needs and how to address those needs typically involves listening to the customer's voice. Numerous cities, including those in Europe, already monitor customer satisfaction on an annual basis.

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