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Journal of Management Research

Editorial.....

Dear Readers

On behalf of the Board of Chetana's Institute of Management and Research (CIMR), Journal of Management Research and Editorial Committee, I am glad to present the September 2022, Volume XIV, Issue II of the Journal. The Journal constantly endeavours to publish high quality articles to disseminate research by members from academia and industry. Readers can particularly notice the changes that the Journal has made in the direction of publishing case studies and articles in the contemporary context. The main focus on this edition is to present articles that cover research on the dimensions of resilience or its impact in the current socio-economic scenario.

Resilience among workforce has always been an area of interest among academicians and practising professionals. Resilience has many dimensions that differ across cultures, socio-economic conditions, employment status, gender, age and language. Language often becomes a mechanism to build resilience in a socio-economic system. Resilience helps in coping with stress, anxiety and adversities. It impacts workplace stress and quality of work. The recent pandemic brough focus on workforce resilience for psychological adjustments.

Readers can look forward to an interesting article on how repositioning Sanskrit as a resilient language provides an adaptive way of communicating the marketing strategy of an organisation to its customers. The article provides a road map that can be used to promote Sanskrit language. The paper on new age manufacturing in the industry 4.0 through smart factories provides some unique insights on how technology will drive efficiency in the post Covid-19 period through use of innovative technologies and digital transformation. The paper provides a very interesting analysis between traditional supply chain and digital supply networks. The silver lining in the pandemic situation is that organisations are paying attention to employee wellness and social well-being. The journal presents some interesting research in the contexts of the Banking, IT, Petrol Bunk sectors on employee retention, safety and stress. The findings provide interesting insights on best practices adopted by organisations to provide a safe and stress-free work environment. The empirical study in the Fuel Bunk Corporation in Tiruchirappalli District used socio demographic variables to analyse the awareness of safety acts in the employees. The study on work-related stress would help the readers to understand the impact of stress on productivity of banking employees. Apart from examining different HR factors that impact work-life balance, they outline some practical recommendations that can be put to action.

Resilience develops the capacity of an organisation to sustain change. It contributes to economic viability and aids in thriving in adverse situations. The case on brand resonance would help the readers to understand how brands adapt to the changing socio-cultural environment and impact the brand perception. The case could be used by students of

Editorial.....

management schools to illustrate how brands adapt their branding strategy during crisis. Technology helps organisations to transform their business practices and enhance customer value. Adoption of Augment Reality and Virtual Reality (AR/VR) can help firms provide a unique experience to customers. The research would help readers to understand how AR and VR technologies impact generation Z customer experience and their purchase decisions.

We take this opportunity to thank the authors for their research contribution. In additional to presenting the findings, the articles present an agenda for future research to build resilience at different levels in different contexts.

We look forward to more contributions by researchers for our next editions.

Dr. Mahesh Luthia
Chief Editor
Associate Professor, OB and HR

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Repositioning the Resilient Language – Sanskrit

Kapil Bhatia

Abstract

It is a given thing that any business and marketing activities need a language so that the ideas, goods or services can reach the right audience and the market share can be captured, but did we ever think that a language would need marketing efforts? Did we ever even have a notion that a language would need promotion, branding, positioning or even repositioning to keep it alive?

There are many languages in the world which have completely lost their existence and are merely a fragment of museum manuscripts that too hidden under glass showcases or to be read, rather glanced from at a distance. Ancient Greek, Latin, Afro-Asian languages to name a few fall under this category. We even use it as an idiom to say "it sounds like Greek and Latin" when we do not understand someone's language. But never have we heard anyone mentioning, "Oh! It sounds Sanskrit to me".

The main reason for this is that Sanskrit is resilient. Over centuries and millennials this divine language has shown great resilience and is alive, used and spoken event today not only in India but even some other parts of the world, and not only by Indians or people of Indian origin but also by other ethnicities as well. Moreover, many Indian languages spoken today like Hindi, Marathi, Gujarati, Bengali to name a few and most of its dialects originated from Sanskrit language. There are a lot of words in European languages that sound and are pronounced quite similarly to that of Sanskrit.

Keywords: *Sanskrit, Language, Repositioning, Relilient*

INTRODUCTION

भाषासु मुख्या मधुरा दिव्या गीर्वाणभारती।

तत्रापि काव्यं मधुरं तस्मादपि सुभाषितम्॥

Translation:

Of all the languages, the divine language - Sanskrit is the most lyrical and sweet language. In Sanskrit, poetry is more melodious wherein the Subhashitas (a small couplet with a deep meaning and spoken in a precise meter) hold prime position.

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Let us not only look at the theoretical and factual part of Sanskrit as a resilient language. This language is also alive and resilient because of its scientific nature. Each word that can be pronounced is written in the same way, it being a phonetic language. The alphabet and vowels are also created in a very scientific manner. There are many reasons which make this language resilient but the hard fact is also that it is also not preferred. We teach Sanskrit merely as a language of religion for reciting the hymns and chants but do not use it for our daily chores.

The question then arises, does Sanskrit actually require repositioning? And if yes, how can we reposition this language?

OBJECTIVES

1. To understand why Sanskrit has been a resilient language
2. To grasp the need for repositioning of this language
3. To comprehend some merits of learning Sanskrit

REPOSITIONING THE LANGUAGE

Time has come that we create a ideal for the study of Sanskrit as part of a living system being practised today. Revival of Sanskrit language should not be demonstrated in the same manner as the dead 'classical' languages like Latin and Greek, which are, in effect, sitting in museums and being picked apart by scholars. Rather, Sanskrit should be seen more like Mandarin, Persian and Arabic – languages which, though ancient, are still actively used today. There is already a flourishing movement by an significant organization called Samskrita Bharati to revive Sanskrit's use for ordinary conversation and reading. The revival should go further and also produce new literary works, plays, novels and the like. So far in all the primary schools there is an emphasis, only on prayers being sung in Sanskrit during morning assembly. Also, if at all Sanskrit is taught, it is taught as a subject of third language or only to score good marks as very few basics are taught in the study. Emphasis should be given on speaking the language. Translate some nursery rhymes or create them in the required context, translate poems and fairy tales that can be retold in Sanskrit. Take it to the mainstream right from the beginning.

Younger generation must be taught this language so that they could feel proud of their rich culture and tradition. A road map must be prepared to frame long term strategy to promote Sanskrit language.

Conventional Viewpoint	**Contemporary and Repositioning Prerequisites**
Religious Language	Commonly Spoken and Understandable Language
Only hymns, chants and prayers	From nursery rhymes to an official and a transaction language
Learn because you must	Learn because it is meritorious
Ethnic and cultural boundaries	Applicable to all aspects of life and multi ethnic
Too much stress on grammar and vocabulary	Basic nuances enough for communication

Some of the merits of knowing Sanskrit Language are as follows:

1. **A Storehouse of knowledge –** The importance of learning Sanskrit can be discussed with the amount of knowledge the language has to offer. From chemistry, botany, biology, grammar to religion and architecture as well as astronomy – the language has texts written in a horde of subjects. It is a myth that most texts written in the Sanskrit language are religious in nature and do not include anything other than Vedic texts, Shlokas and mantras. In fact, there's actually a lot more non-religious texts written in Sanskrit in every subject you can possibly imagine!

2. **Health Benefits of Learning Sanskrit –** It is scientifically proven that reciting the Sanskrit alphabet, shlokas, and alliterated phrases results in one rhythmically using minimal and maximal breath, contraction, and expansion in one's breathing efforts. This system is a pranayama practice in itself. It aids in balancing and calming the mind. Probably, no other language could do that.

3. **Incredibly easy to learn –** Sanskrit is incredibly easy to learn. Learning most languages, including English, requires you to learn the correct words first, and then stress over sentence construction. For Sanskrit, it is different. Words can be rearranged in any order one desires to make a coherent sentence. Even if the order of the words in the sentence is changed, it will not have a different meaning and neither the sentence will be meaningless.

4. **Gateway to other languages –** Sanskrit is a gateway to learn all other Indian languages. Most alphabet and vowels and even words of most Indian languages have their roots in Sanskrit. In fact many European languages also share many words that are similar to Sanskrit words in the same context.

5. **Memory Power –** In the journal *Scientific American*, neuroscientist, Dr James Hartzell has coined the term "The Sanskrit Effect". He mentions that memorizing Vedic mantras increases the size of brain regions which are associated with cognitive function such as memory, both short term and long term memory. It reciting mantras enhances memory and thinking. Successful experiments had been conducted to conclude on the same. It was also proven that power of memory, decision making, sensory perception and the like would last longer in those who were trained earlier in memorising Sanskrit mantras. Also an important point to note is that it need not be verbal and religious chanting at all. It can be visual and spatial training as well.

NASA, Artificial Intelligence (AI) and its connection with Sanskrit

Sanskrit has always been an important language in intellectual communities. Despite its ancient origin, the language has some amazing characteristics that are considered helpful in different fields. Its recent involvement with artificial intelligence is an honour proving its power for being a valuable course of literature. The grammar also makes Sanskrit suitable for machine learning and even Artificial Intelligence (AI).

According to NASA scientist Rick Briggs, Sanskrit is the best language for Artificial Learning (AI). He refers to the difficulty an artificial intelligence would have in detecting the true meaning of words spoken or written in one of our natural languages. Take for example an artificial intelligence attempting to determine the meaning of a sarcastic sentence. Small tonal fluctuations and indicators are extremely difficult for an AI with a microphone to detect accurately; and if the sentence was simply read, without context how *would* one example be discernible from the other? Rick Briggs suggests that Sanskrit, an ancient form of communication, is a naturally spoken language with mechanics and grammatical rules that would allow an artificial intelligence to more accurately interpret sentences during linguistic analysis. More accurate linguistic analysis would result in an artificial intelligence being able to respond more accurately.

What can be done and what needs to be done?
Sanskrit is standardized and has been preserved in its form over many-many centuries, while the spoken language has evolved over time. Writing our modern literature in Sanskrit will preserve the meaning of it for future. This will make it easier for future generations to read our ideas in future without needing a translator in between. As strong nation is built on a strong legacy of a civilizational base. Sanskrit texts can provide that base. Sanskrit language and texts are revered in all parts of India. Recently, Union Education Minister, Dharmendra Pradhan while addressing a gathering said, "Sanskrit is not just a language, it is an emotion. Our knowledge and wisdom are our wealth. The onus is on all of us to take our civilization forward for centuries and achieve the ideals of 'Vasudhaiva Kutumbakam." (The entire world is one family).

The education minister highlighted that as envisaged in the National Education Policy, the government has given importance to all Indian languages including Sanskrit. "It has a great contribution in unifying various Indian languages and Sanskrit Universities will move towards becoming large multidisciplinary institutions of higher learning," the minister said. To be marketable, it also has to be profitable. With this initiative from the centre, even this problem seems to be solved (partially though, at least as of now).

Participation from all stake holders – citizens, government, teaching-learning community, organizations and even higher education is a must. Reviving and Repositioning this language – Sanskrit is in our hands. How far we are successful in repositioning this *language,* time alone shall tell.

INDOCTRINATING THE FOUR PS FOR REPOSITIONING OF SANSKRIT

To reposition any product or service, the marketers have to relook on the four Ps. Some modifications, changes and innovation have to be brought in the Product, Price, Place and Promotion. How do we do this for repositioning the language?

Product
Innovate the ways of teaching-learning for this language. Segmentation must be not only for religious learnings but also for Sanskrit as a spoken language. Hence marketing certain related products can have this language on its packaging and labelling. Brands like ReSanskrit.com who sell their accessories like T Shirts and Hoodies have imprinted some Sanskrit texts on them.

Price
Using a penetrating pricing strategy can work wonders for this aspect. Samskrit Bharati is conducting completely free classes for basic teaching. In fact, during pandemic time, all classes (Sanskrit Sambhashan Shibirs) were conducted completely online. Even registration for Sanskrit related advanced courses and exams are moderately or very low priced.

Place
Visibility is an important component in marketing. Hence, the script, language, quotes etc. must be made visible in many communications. Whether it is a bus or train ticket, or a currency note or a garment or an accessory, some visual display may play

in the form of quotes or a basic communication will play a small role to promote Sanskrit. From an exclusive placement, we need to move towards intensive placement for in whatever ways possible.

Promotion

Government has taken and will take initiatives to promote the language through universities, schools and other institutions. Financial assistance, scholarships etc. are a routine incentive to promote Sanskrit. What beyond this? Google has recently included Sanskrit in its Google Translate Services. Hence it is easier to get the right translation for learners as well as non-learners. Development and promotion of various e content for various publics should also be made available.

रस सुबोधा विश्वमनोज्ञा ललिता हृद्या रमणीया ।

अमृतवाणी संस्कृत भाषा नैव क्लिष्टा न च कठिणा ॥

Beautiful, easy to understand and grasp, universally agreeable to the mind. Elegant, beloved, enjoyable, the sweet speech of Sanskrit language is neither ambiguous nor difficult.

BIBLIOGRAPHY

1. Malhotra, Rajiv. (2018) *The Battle for Sanskrit*

Web References

1. Pns. (2022, February 28). *Must take steps to promote and propagate Sanskrit language: Thakur*. The Pioneer. Retrieved May 27, 2022, from https://www.dailypioneer.com/2022/state-editions/must-take-steps-to-promote-and-propagate-sanskrit-language—thakur.html

2. LanguageCurry. (n.d.). *5 benefits of learning sanskrit*. LanguageCurry. Retrieved May 27, 2022, from https://blogs.languagecurry.com/articles/5-benefits-of-learning-sanskrit

3. https://www.analyticsinsight.net/adoption-of-sanskrit-by-nasa-aims-to-change-the-language-gap/.

4. Balasubramanian, D. (2018, January 13). *The 'Sanskrit effect' and how rigorous memorising helps the memory*. Return to frontpage. Retrieved May 27, 2022, from https://www.thehindu.com/sci-tech/science/the-sanskrit-effect-and-how-rigorous-memorising-helps-the-memory/article22436878.ece

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The New Age of Manufacturing - Industry 4.0 and Smart Factory

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Abstract

This research paper aims to explain various critical factors over the perspective of making India as a manufacturing hub in post COVID-19 using Industry 4.0 and smart factories. We are focusing on - how can Indian industries be benefitted from Industry 4.0 and smart factories, what are current challenges, how can Government policies help, what are potential drawbacks in implementing.

Keywords: *Smart factory, Industry 4.0, Digital marketing, AI, IoT*

INTRODUCTION

Smart factories can help in making India as the next manufacturing hub. Smart factory is more than simply automating; it is digitization of operations. A smart factory is an integration of data, supply chain, development unit, technology, and customer. It is a more responsive, agile and well-connected network of planning. The real-time data collected is transparent for humans and automated machines for taking appropriate decisions. With the fast-changing technologies and customized user requirements, it is very important for the factories to be adaptable and a smart factory is one solution for it. Smart factories can self-adapt, connect production and operation systems to learn and adapt. It can take care of manufacturing, inventory management, digitization of operations and all such activities across the manufacturing network. Smart factories ensure that there is no negative influence from local politicians or other labour unions.

With optimal use of digital platforms, India can grow and give tough competition to existing top players. With ongoing changes and improvements in technologies, the smart industry can help in analysing using the power of algorithms. As smart factories are well connected and data is centralized, cybersecurity becomes a major concern and a priority for the manufactures to secure data from all possible cyber-attacks.

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Industry 4.0 is more than just a transformation of the existing IT processes and automation, as discussed earlier. Industry 4.0 also consists of marketing automation that is a lovechild of marketing and digitization. In this digital evolution, we must consider other factors like marketing as well. Digital marketing and marketing automation can target new customers, build a brand, bring new customers, regain the lost ones, make the existing ones loyal and create a great overall experience for the customers. The self-learning machine algorithms are designed to work in the hands of the people that manage your manufacturing lines; and it takes just a matter of hours to build a working model. with little to no interruption to production.

HOW INDIAN INDUSTRIES CAN BE BENEFITTED FROM INDUSTRY 4.0 AND SMART FACTORY?

Integration: The crux of a smart factory and industry 4.0 is integrating everything related to an industry and manufacturing through the internet, cloud, big data and IoT.

Software packages like Zenon provide services and the technology needed to integrate the processes, companies and the industry to simplify the operational processes in a smarter way. IoT provides the data from all around the industry and acts like the spine of the whole process.

This data can help manufacturers understand what is currently going on in the industry, what changes are going on and how they can react to it especially if the industry and the economy is very volatile.

A great example of it can be taken of the footwear industry which faced losses in the year 2020 due to the pandemic and trend changes. If the whole industry was connected with a seamless digital rope, the manufacturers would have known the impact of COVID-19 when it first showed its traces back in 2019 and would have controlled the manufacturing of the extra units that are now lying in the warehouses. Also, the internet and big data could've helped them understand the change in style and trends in the footwear fashion industry.

Again, explaining with an example, most of the fashion is influenced by western countries and South Korea. Indian footwear manufacturers can use big data and analytical tools to find out what are the emerging trends in those fashion industries, what the customers in their market will react positively and in how much time will they be able to adapt it. In this way, manufacturing of extra units could be avoided, only the ones demanded are produced thus reducing wastage. Systematic manufacturing and production don't just mean meeting the demands and reducing wastages, it also means reducing the costs by avoiding unnecessary money spending on raw materials, labour and machine usage, electricity usage, etc.

Internet, Cloud and Blockchain can help storage of data into an integrated system, creating transparency and quick access of data intra companies and inter companies. The hierarchical integration will create a smooth process within the organization by continuous seamless interaction between the top, middle management and operational staff working at the factory levels.

When we talk about inter companies, the companies in a particular industry can interact with each other and can also analyse their competitors. This can majorly help in an oligopolistic market where constant interaction between the competitors is important.

We have discussed how the internet, cloud and blockchain enables people to people interaction.

But the essence of a smart factory lies with the interaction of humans with the digital systems. This is where the Cyber Physical System comes into the picture. Cyber-physical systems integrate software into physical objects and hardware, connecting them to the digital networks and to each other.

With the help of actuators, sensors and embedded systems, manufacturers can take help of robots to perform activities that are risky to humans like in a chemical factory. Keeping safety in mind, cranes and ladders can be avoided by introducing 'smart shelves'. These shelves will rotate like a Ferris wheel and come down with the packages or materials that a worker will require. This can eliminate the risk of falling from faulty ladders. These shelves will have automated systems which will be connected to a digital interface that will automatically push out the products that have to be shipped out on a particular day. In this way one doesn't have to depend upon a supervisor to again and again check out daily schedules physically and can avoid delay and faulty shipments due to confusions and absenteeism.

Communication between the digital interfaces within each other and with humans can bring in greater flexibility.

Also, machines can have a system built up on their own which will automatically let the factory supervisors know when the machines will require servicing or which one is not operating efficiently. Any discrepancies by one machine will be divided by other automated systems. Also, driverless robots can be used in assembly processes which will reduce the physical labour thus eliminating stress, fatigue and accidents.

Chemical industry is the backbone of many manufacturing industries. Thus, changes in the chemical industry will have a huge effect on a number of other industries. Through advances in physical and digital technologies, Industries 4.0 can catalyse transformation through streamlining operations, smart supply chain management and business growth by creating new business models.

Industry 4.0 helps beyond the traditional applications; companies can deploy systems with advanced analytical models for predictive inventory management and process optimization. For mass customizations, as soon as an order is placed, with the help of radio-frequency, it can inform the equipment on production lines about the required composition and packaging method. This all can be done without human intervention.

The chemical industry needs high levels of maintenance and monitoring for temperature, pressure, tank levels, etc. Industry 4.0 technologies such as virtual sensors can help in collecting data and improving energy efficiency. Drones with high-resolution cameras can capture more information than human eyes.

WHAT IS THE EXPECTED RETURN ON INVESTMENT (ROI)?

All the manufacturers and industrialists are thinking about how to restart their companies after Covid and how to emerge as a company with advanced technology with real time decision making and problem-solving skills. Here smart factories come into picture. Although the cost of converting a normal factory into a smart factory is huge, the return on investment is even bigger. Return on investment is not just in terms of increasing the revenues, but it will also help to minimize cost; for example labour cost by appropriately calculating the number of employees required, by analysis the buying pattern of customer to further forecast the demand of specific product, minimizing the warehouse cost, by analysing the amount of raw material to be bought and all this will be maintain on an online platform which will make this information available from anywhere and it will help management to make appropriate decision whenever required.

OBJECTIVES

❖ *To explore various current challenges in the current scenario for India to be next manufacturing hub*

- ➢ Cost – In countries like India where labour is cheap, industries prefer to work in traditional ways. As deployment and installation of smart devices in industry is very expensive. To embed all the latest technologies in industry and train employees to work is costly.
- ➢ Infrastructure – Currently, there is no availability of proper infrastructure like construction of roads, supply of electricity, water, network availability etc. that is a hindrance for bringing smart factories into implementation.

❖ *To adapt new and 'smart' ways of manufacturing:*

The objective of smart manufacturing around the globe has become wider due to the integrative operations of numerous technologies that result in cost and time saving, easy flexibility, clear understanding, agile response to market fluctuations and easy remote surveillance.

❖ *To study on how Government can help by giving out policies and guidance to make India adopt 'Smart Factory':*

- ➢ Improving infrastructure. As per 2021-22 budget plan, Government of India has dedicated plans for improving infrastructure of the country. If everything goes as per plan, it will be really beneficial for the country. This will help India to improve supply chains.
- ➢ Removing trade barriers, relaxation in tax structure, imports and exports for manufacturing industries.
- ➢ Government approvals systems should be moved to online platforms so that MNCs do not suffer waiting and corruption. India can develop trust that technology will not be misused or copied as most of the MNCs don't believe in China on this ground.

Domestic demand for MNCs products needs to be created. Government should help and support MNCs by providing land with adequate infrastructure such as transportation, water, uninterrupted electricity, and network connectivity.

❖ *To emphasize on using current new technologies:*

Technology:

- IoT
- AI
- Big Data
- Cloud Computing

Information Systems:

- ERP
- Data Analytics
- Industrial Network Layer
- Cyber-physical systems

Smart Artifacts:

- Machines
- Products
- Conveyors

❖ *To explore the concept of smart factory and its scope in India and suggest ways to enhance implementation of smart factories in Indian manufacturing industry:*

- ➢ Industries can use analytics

- IoT and smart shelves to reduce accidents
- Cloud and blockchain for data management
- Robots can be used for regular standardized processes
- Drones can help capture data from risk-prone areas

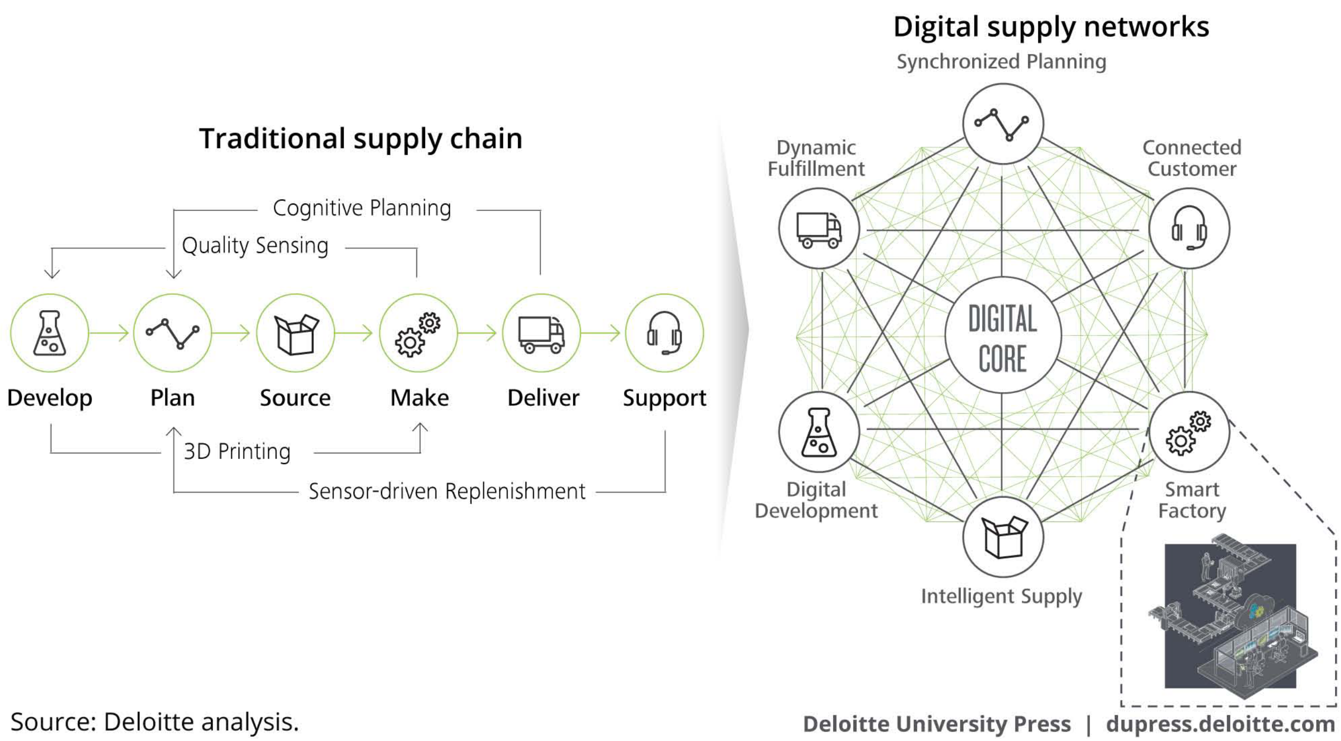
RESEARCH METHODOLOGY

- ***Deductive Reasoning*****:** Other countries that have adopted this technology have faced improvement and thus we are assuming that the implementation of this technology in India will also prove to be beneficial.
- ***Exploratory Research*****:** None of the data used in this research paper is primary data. We have referred to the existing data available and made conclusions based on our understanding and research.
- ***Applied Research*****:** We have connected our research and understanding with the already proven theories and methods like the Assembly line method of production that if paired with the technologies mentioned below will provide desired results.

LITERATURE REVIEW

- Deloitte Article gave us insights to what a smart factory is, how it can benefit companies, what are key components and technologies that smart factories are composed of.

Following figure is taken from the article which clearly shows how the traditional supply chain is shifted to the digital supply network.



Source: https://www2.deloitte.com/us/en/insights/focus/industry-4-0/smart-factory-connected-manufacturing.html

The article also covered the main characteristics of Smart Factory which included –

- How traditional datasets are connected with new sensors and servers.
- How automation is optimizing production processes
- How proactiveness and predictive analysis help is real-time safety monitoring
- How linkages to customer data help in maintaining transparency in order tracking
- How agility and adaptability work in product planning

❖ IBM article covered parameters of Manufacturing Industries –
  - ⇒ **Shipment:** Trusted suppliers that help building customer relations. Using Cloud and AI for developing smart supply chains insights.
  - ⇒ **Smart Factory:** Use of AI for identification of cyber threats, reducing manufacturing defects in a cost-effective manner. Innovating processes and using cloud, AI for analysing data to attain minimum downtime and higher benefits. Linking manufacturing with IoT sensors.
  - ⇒ **Agile Offices:** Drawing insights with open data standards and technologies, enhancing customer experience, and modernising equipment.

❖ Research paper by Selvam V. talked about challenges for India to be the next manufacturing hub. It also covered the opportunities in India with initiatives like 'Make in India' and encouraging entrepreneurs.

❖ Journal article provided detailed insights to –
  - ⇒ Industry 4.0 kinds of integration: Horizontal, Vertical and End-to-End Engineering Integration
  - ⇒ Technologies for Industry 4.0: AI, Big data, Blockchain, Cloud, IoT
  - ⇒ System Architecture: Physical Resource Layer, Industrial Network Layer, Cloud Layer, Supervision and Control Terminal Layer
  - ⇒ Coordination with smart devices for optimizing operations
  - ⇒ Benefits of implementing smart industry and its technical challenges

IDENTIFICATION AND EVALUATION OF THE SECONDARY DATA SET

- ➢ The data was collected from the official websites of 'Deloitte' and 'IBM' for the basic and precise understanding of the topic. We learnt what Smart Factory and Industry 4.0 is and how it actually works.
- ➢ For the challenges and opportunities in various sectors we referred to 'Research Gate' to understand the perspective of other peers and professors about Smart Factory by referring to their research papers.
- ➢ After reading various papers and referring to various sites, we compared the data and made sure we were on the same page. The data available in these sites matched with each other, thus giving us more clarity on the topic.
- ➢ From Journals, we got a clarity about the expected benefits that manufacturing industries could get by the adoption of Smart Factories for flexibility and agility in operations.

POTENTIAL DRAWBACKS

- **Skilled labour requirements -** When we talk about smart factories, latest technologies and all, the labour requirements for performing those tasks are also changed. We need to recruit skilled labour that can understand and manage working with these devices and technologies.
- **Cyber-attacks -** With the advancement of technology, there is an increase in cyber-attacks too.

When entire company data is consolidated at a place, it becomes easy for hackers to exploit it. Therefore, the industry has to store encrypted data and ensure cyber security laws.

CONCLUSION

This research paper describes various opinions, suggestions and thoughts based on our study into the topic. We believe that implementation of smart factories will help growth of the manufacturing sector by linking operations technologies with digital technologies. India has the ability to master skills efficiently and have local responsiveness. With the addition of innovation into it, India can be a manufacturing hub. This research paper can be referred for further research to achieve ‘Make in India’ goals.

In this research paper, we are not giving any end state of the smart factory. We are looking for changes in smart factories that are required for making India a manufacturing hub. It is an ongoing process that will develop, as the technology will advance. It is a flexible and continuous journey that aims to improve how industries usually work.

LIMITATIONS AND FUTURE SCOPE

This research paper is based on the secondary data, no primary data was collected. There can be a variety of other options available for a particular industry to integrate and grow. We have listed down suggestions as per our research study. For example- some service providing companies may not need to be worried about the supply chain with IoT or inventory management. They can improve their business model by integrating cloud, big data, and AI technologies. For manufacturing industries, appropriate selection of technologies needs to be done based on their process model. With some policy support, India can extensively make use of smart factories and be the next manufacturing hub in the fourth industrial revolution.

REFERENCES

1. https://www2.deloitte.com/us/en/insights/focus/industry-4-0/chemicals-industry-value-chain.html
2. https://www.ibm.com/industries/industrial/resources/business-transformation-interactive/scenes/smart-factory/select/details/production-quality
3. https://www2.deloitte.com/us/en/insights/focus/industry-4-0/partner-ecosystem-industry-4-0.html
4. https://www2.deloitte.com/us/en/insights/focus/industry-4-0/smart-factory-connected-manufacturing.html
5. https://www.e-xanthos.co.uk/blog/industry-4-0-and-digital-marketing-creating-a-digital-strategy-in-manufacturing
6. https://www.researchgate.net/publication/335027590_The_state_of_marketing_analytics_in_research_and_practice/link/5d683114299bf1d59944900f/download
7. https://journals.sagepub.com/doi/full/10.1155/2016/3159805
8. https://www.ibm.com/thought-leadership/institute-business-value/report/transformation-industrial-products
9. Mr. Chaitanya Vijay Bidnur, “A Study on Industry 4.0 Concept”, International Journal of Engineering Research & Technology (IJERT), Vol. 9 Issue 04, April-2020
10. Selvam, V., “Make in India a Manufacturing Hub: The real opportunities and challenges: A Literature Review”, in 21st May, 2016, Published online.

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Factors affecting employee retention in IT Sector

Krishna Prakash M, Devakumar S and Dr. Jawahar Philimis

Abstract

Employee retention is an important aspect of the business strategy because it contributes to the growth of the organization. Retaining employees, especially talented employees, would give the company a long-term competitive advantage. As a result, this study was carried out in order to comprehend the factors influencing employee retention in the IT sector.

This is a conceptual paper reviewed in the research articles, News, and other sources related to retention for the past 4 years to understand the industry.

Many employees may leave for a variety of reasons that are not publicly disclosed, such as a lack of job security, a lack of career advancement, a desire for new opportunities, a desire for higher pay, issues with supervisors, and a variety of other personal reasons.

It makes it extremely difficult for human resource personnel to fill the resulting void. Modern human resource managers are taking various steps to reduce employee attrition, which has proven to be a significant challenge for today's managers.

This study examined in-depth broad factors such as compensation, work-life balance, work environment, job security, job satisfaction, training, and development.

To improve employee retention, the company's measures and initiatives should be more consistent. Long-term retention necessitates a structured and all-inclusive approach.

Keywords: *Employee Retention, IT Industry, Retention Factors*

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1. INTRODUCTION

Employees have always been valuable assets to any company. They might be referred to as an organization's life-blood due to their vital nature. As technology advances, most firms are becoming increasingly technology-driven. However, because the technology requires human resources to function, this circumstance does not diminish the worth of employees in a business.

In most industries, competition is becoming more intense as a result of challenges such as globalization. This condition has an impact on the job market since organizations need more human resources to stay competitive in their respective industries. To be competitive, organizations must not only attract the best talents but also keep them on the job for a long time.

The most difficult task that businesses face nowadays is not just how to manage people, but also how to keep them on the job for as long as possible while keeping them healthy and motivated. This research focuses on the factors that influence employee retention in IT Sector.

Current scenario of Software Industry in India

The Indian Software Industry plays a critical role in India's economic growth. The software industry in India is viewed as the growth engine of the Indian economy, contributing to an increase in Gross Domestic Product (GDP), urban employment, and exports. Over the last decade, the Software industry has grown by more than 40 to 50 percent annually. In India, Software companies are concentrated in certain places like Bangalore, Chennai, Hyderabad, and Delhi.

In the subsequent sections, the literature review, Conceptual framework, Recommendations, and conclusion are presented.

2. LITERATURE REVIEW

A literature review on Factors Affecting Employee retention.

S.No	Author(s)	Study based on	Abstract
1	Dimitrios Chatzoudes, Prodromos Chatzoglou	Factors Affecting Employee Retention: Conceptual Framework	The study, among others, underlines the huge impact of employee commitment and job satisfaction on increasing the intention of employees to stay in the same company
2	Tammana Mohapatra, Debasmita Nayak	An Analysis of Factors Affecting Employee – Retention during Crisis of COVID -19	This study will provide a better understanding of how organizations could identify new factors to improve their employee – retention program during medical – based pandemics and financial slumps.
3	Dr. Mahesh V.J. Narmadha K.R	Employee retention strategies in IT sector – a perceptual survey	This study has been conducted to examine Employee Retention Strategy used in the IT sector to retain their employees
4	Diwakar Singh	A Literature Review on Employee Retention with Focus on Recent Trends	The objective of this study is to critically analyze the various works done in the field of employee retention and highlight factors responsible for employee departure and retention initiatives followed to retain them

S.No	Author(s)	Study based on	Abstract
5	J. Pavithra, Thirukumaran	A study on employee retention with special reference at Philips electronics, Chennai	The objective of the study is to analyze the organizational factors influencing the employee retention
6	T.S. Kumar, Dr. M. Kavitha	Employee retention- a real-time challenges in Indian it sector - review paper	This study is about the real challenges faced by IT Industry to retain the top talents.

2.2 PROBLEM STATEMENT

Employee Retention has become a major issue in the global economy because most employees are leaving organizations to pursue other opportunities. In some cases, employees do not even inform their employers of their intention to leave. However, some of them are giving prior notices to leave organizations and firms in accordance with organizational norms and pursue better opportunities.

To fill vacant positions and look for new employees appointed from time to time in the place of the employees who have left, the organization suffers greatly in order to motivate the new employees toward desired objectives and goals. This will affect badly the HR policies in the IT Sector. To overtake this problem, major steps must be taken to retain employees in an organization for better sustainability and cognitive involvement.

2.3 OBJECTIVES

To identify the factors influencing Employee Retention management in IT Industry.

2.4 RESEARCH METHODOLOGY

This study is descriptive in nature and only secondary data has been used in it. The secondary data consists of books and various research journals. This present study examined earlier studies on employee retention in order to describe them and define a distinct phenomenon.

The current study utilized 20 research papers from the year (2016 – 2021) (from sources including Google Scholar, Emerald, Springer, Elsevier, and Scopus articles) to gather relevant information.

2.5 EMPLOYEE RETENTION

Employee retention refers to the strategies and processes that a company adopts to keep its best employees and reduce the risk of turnover. Employee retention and turnover is a major workforce management concern for many businesses and HR professionals, resulting in considerable operating expenses for businesses and affecting their opportunities to grow and profit.

2.6 FACTORS AFFECTING EMPLOYEE RETENTION

Overview

In previous research, a number of factors associated with employee retention have been identified. The factors commonly cited are developmental opportunities and quality supervision, compensation and appreciation of work done; leadership; organizational support, job flexibility, relationships with colleagues, work-life balance, communication, work environment, and training and development.

Tammana Mohapatra has said that the retention factors include workplace guidelines, financial benefits, work-life balance, and communication during the COVID period. Bodjrenou Kossivi and Ming Xu [8] have identified eight retention factors: development opportunities, compensation, work-life balance, leadership, work environment, social support, autonomy, and training and development. Dr. M. Kavitha said that organizational culture, social support, and work-life balance are the important factors that employees are quitting the organization. Our analysis of individual factors is mainly based on the work of Bodjrenou Kossivi. In our opinion, these eight retention factors are quite crucial for retaining personnel.

2.7 COMPENSATION

Compensation is a monetary payment made to an individual in exchange for their services. It includes salary or wages, commission, and any incentives or perks that come with the given employee's position.

Many researchers have been conducted on the relationship between compensation and employee retention. In 2021 Pieter Schaap[8] and his team have identified compensation as a more important factor to retain employees. Pay has a mixed effect on retention, according to researchers. For some employees, pay satisfaction is a big factor in whether or not they stay with the company.

William D. Frye [9] (2019) observed that Pay has a more positive impact on the employees retained in the organization. Pay is very important now a day's, especially in a pandemic situation like COVID 19. The pandemic has yet to be over. Many employees prioritize package as their top priority, thus I'll assume that compensation is a significant component in keeping personnel in the firm.

2.8 TRAINING AND DEVELOPMENT

Training and development initiatives are educational activities within an organization that is designed to improve the job performance of an individual or group. Training and development in public and private enterprises is a vital department to the organization.

These programs usually entail improving a worker's knowledge and skill sets as well as increasing motivation to improve job performance.

Many researchers have been conducted on the relationship between Training and Development and employee retention. Based upon these studies Training and development has one of the key factors for employees in the organization, especially in the IT Sector. In the year 2020, Ryan Joseph Calinao [2] has observed that there is a strong relationship between Training and development and retention.

The majority of employees left the company after receiving training, resulting in a loss of money, time, and resources for the company. As a result, the company must choose its staff carefully and provide them with training. Moaz Nagib Gharib[1] (2019) states that Training and development have a positive impact on retention.

Shahtaj Yousuf [4] (2019) has come to the conclusion that training and development is one of the important factors evident to contribute to accelerating the retention rate of employees at different variations. Dr. M. Kavitha[17] (2019) has found that training and career development is a leading motivator that leads to retention. As a result, training and development are crucial components for both the organization and the employees.

2.9 WORK ENVIRONMENT

The setting, social features, and physical conditions in which you perform your job are referred to as a "work environment." These elements can impact feelings of well-being, workplace relationships, collaboration, efficiency, and employee health.

The work environment is essential for the employees to work freely and give high productivity to the organization. Syed Harris and Syed Noordin[1] (2021) have identified that employee retention is positively impacted by rewards and the work environment.

Many researchers have found that work environment factors are very crucial factors in their studies.

Employee retention appears to be influenced by a pleasant work environment. Various studies note that the work environment has a direct influence on an organization's ability to maintain its work-force, which leads to improved employee retention. DR. Mahesh VJ [13] has identified that a good working environment positively impacts employee retention in the IT sector in the year 2020. As an outcome, I argue that the workplace atmosphere is a significant factor in retaining personnel.

210 WORK LIFE BALANCE

Work-life balance is a state of equilibrium in which one's professional and personal obligations are effectively balanced. A person who does not have a work-life balance has more work and home responsibilities, works longer hours, and does not have enough personal time.

A previous study has noted that work-life balance is a very crucial factor in retaining employees nowadays, especially in the IT sector. Tammana Mohapatra[12] (2021) has identified that work-life balance is a very important key factor in retaining employees during the COVID period.

Employee retention requires a good work-life balance. Many employees nowadays prefer to spend time with their families, and most IT companies strive to maintain this feature in order to keep their personnel. Pieter Schaap [8] (2020) has come to the conclusion that work-life balance has a positive impact on retention. Dr.M.Kavitha [17] has pointed out that work-life balance, job stress, and relationships with friends are the key factors to retaining employees in the organization.

Work-life balance is one of the most important factors to consider during a pandemic, such as COVID 19. As a result, both the company and the personnel rely heavily on this element.

2.11 REWARDS AND RECOGNITION

A reward and recognition system are one in which people are recognized for their performance in either an intrinsic or extrinsic way. Recognition and rewards are present in a work environment where appropriate acknowledgment and appreciation of employees' efforts are given in a fair and timely manner.

Much research has been conducted on the relationship between rewards and recognition and employee retention. According to Syed Harris Syed Noordin's [5] research work from 2021, rewards have been found to have a positive and significant impact on employee retention, which would improve employee retention.

Rewards and recognizing high-performing employees are important tools for the organization. If the firms have not recognized or are not given rewards based on employees' performance, they should leave the organization.

Dr. Mahesh VJ [13] and his team (2020) have observed that increased rewards and recognition have a positive significant impact on Employee retention in the IT sector.

As a result, I believe that one of the most important things in keeping employees for a longer amount of time is rewards and recognition.

2.12 JOB SECURITY

Job security refers to the assurance that your job will be not eliminated. It's a guarantee that you'll be able to continue working in your current position for the foreseeable future. Job security comes with a feeling of protection against things like layoffs, economic downfalls, and other factors that could impact employment.

Ryan Joseph Calinao [2] (2020) has mentioned that there is a strong relationship between Job security on retention.

Employee job security is one of the important components which brings employees' attachment to the organization.

Previous research suggests that Job security has a more positive impact on retention. Moaz Nagib Gharib [1] (2019) and his team suggested that Job security and Job satisfaction have a more positive impact on retention. Thus we conclude job security is a more significant factor since it ensures a consistent income and eliminates the stress of being fired at any time

2.13 RELATIONSHIP WITH SUPERIORS

The superior-subordinate relationship is the main, sometimes the only, and one that is formally established by the organization. It is the one that is shown on the traditional organization chart. For most managers, it is a key relationship and takes up more time than any other type of contact.

Dr. Mahesh VJ [13] and his team (2020) have mentioned that supervisor support and career opportunity have a positive significant impact on Employee Retention in the IT sector.

In a fast-paced work environment, any supervisor must be wary of how they handle relationships with their subordinates. Previous research suggests that relationships with superiors are the most important factors in retention. William D. Frye has mentioned in his article that relationships with managers are the important factors to retain the employees in the year 2019. Dr. S R Sharma [18] (2017), relationships with superiors are one of the most important elements to consider when making a job transition for an IT professional.

As a result, we suggest that having a productive and positive peer connection is critical to achieving organizational goals and getting work done efficiently. It is critical for successful managers to comprehend it, possess the necessary abilities, and successfully applies them to achieve personal, team, and organizational objectives by establishing a strong internal network.

2.14 JOB SATISFACTION

Job satisfaction is a metric that measures how happy or fulfilled an employee is with their job. It is measured in behavioral, cognitive and affective components.

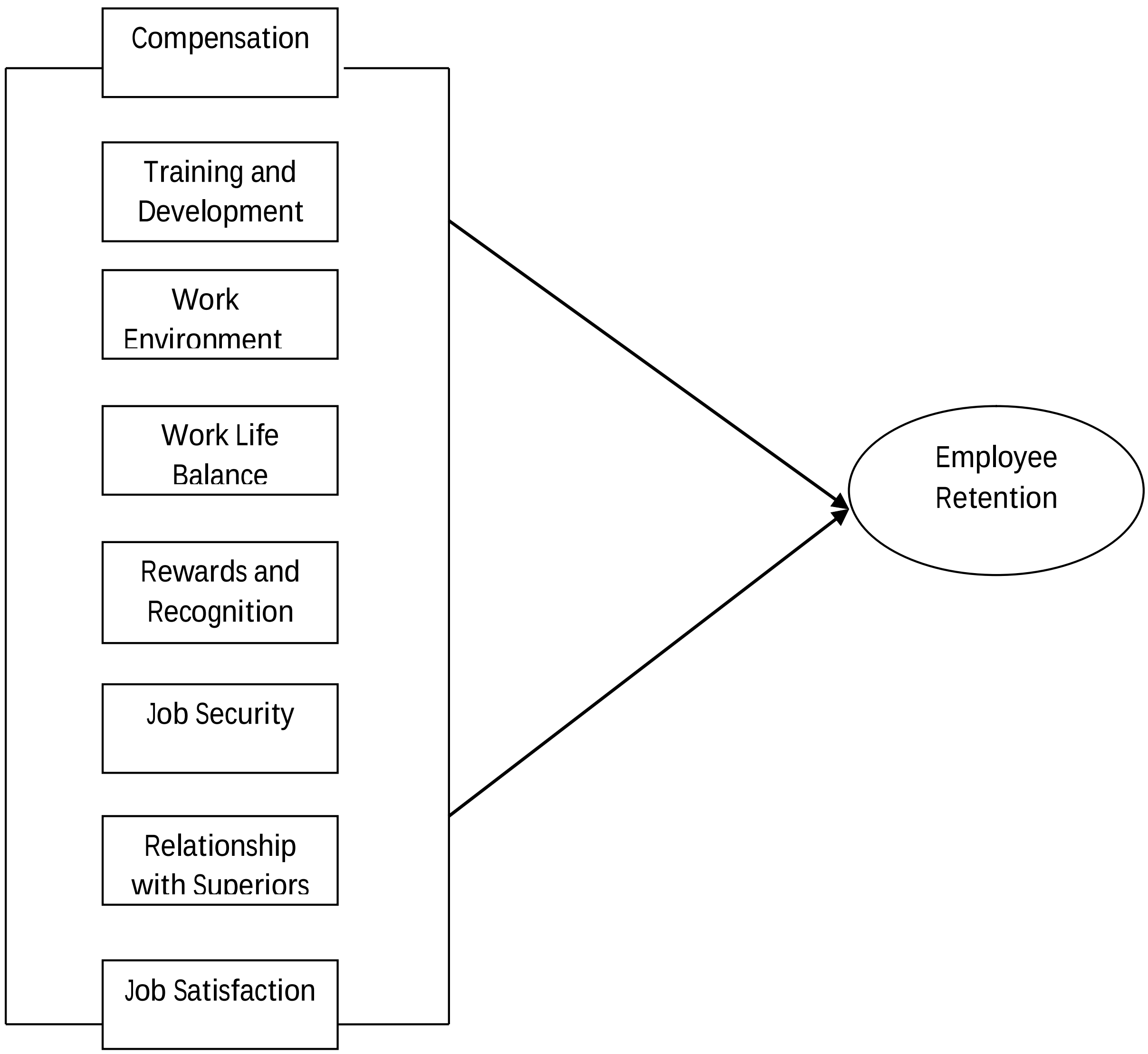
Previous research suggests that job satisfaction has most important factors on retention. Yvonne Sishuwa (2020)[11] has suggested that job satisfaction and organizational commitment as factors having an influence on employee retention.

Job satisfaction is the result of organization movements and apparent job experience that reveals the complex nature of the interactions. Employee job satisfaction is a mix of positive and negative feelings about their jobs. Payment, working relationships, position, and job security are examples of factors that influence job satisfaction. According to Moaz Nagib Gharib [1] (2019) states that Job security and Job satisfaction has more impact on retention.

Overall job satisfaction is an important factor in helping organizations improves their overall performance and productivity. Furthermore, because employees are satisfied with their current jobs, the employee turnover rate maybe dramatically reduced.

2.15 FACTORS AFFECTING EMPLOYEE RETENTION MODEL

This model can be derived from our previous research papers.



Factors affecting Employee retention model

3. RECOMMENDATIONS

There are no fixed procedures that demonstrate the relevance and significance of how to retain employees and keep them committed to the organization because employers place different emphasis on different variables depending on what suits their organization best.

Hiring employees is only the first step toward developing a strong, committed workforce. The real challenge is to keep them for a very long period of time. Based on our research, the following are some suggestions for employee retention and commitment:-

1. IT companies must consider their Working Environment, Job security, and Job satisfaction prior to their other tasks.

2. Organizations must conduct "stay" and "exit" interviews to understand why employees chose to leave the organization. This information will help in understanding the reasons why employees leave the organization. Based on this organizations must strengthen their employee-retention strategies.

3. Organizations should motivate employees by providing awards, rewards, and incentives once a year. It increases employees' satisfaction and interest in the job and also increases concern productivity.

4. Retention of Key employees is critical to the long-term health and success of any organization. It is common knowledge that retaining your best employees ensures satisfied colleagues and reporting staff, effective succession planning, and deeply embedded organizational knowledge and learning.

4. CONCLUSION

Employee retention is a major concern for businesses these days. Organizations are now recognizing that their competitive advantage lies not in capital or physical resources, but in human resources. The retention of valuable IT workers is becoming increasingly difficult due to the complex nature and demands of the work, as well as management's inability to understand their needs, which causes them to change jobs.

When an employee decides to leave, a number of factors influence his decision. These factors are compensation, Work-life balance, Job security, and Job satisfaction helps in retention. If an employee leaves the organization, the HR department should intervene and find out why they are leaving. Organizations should strive to develop effective retention policies and practices.

REFERENCES

1. Moaz Nagib Gharib, Ahmad Taha Kahwaji, Mohammed Osman Elrasheed, (2017). Factors Affecting Staff Retention Strategies Used in Private Syrian Companies during the International Review of Management and Marketing, 7(2), 202-206.

2. Ryan Joseph Calinao, Frances G. Tabla, Lorenzo G. Carlo (2020), Factors affecting Employee Retention to the Services of an International Cruise Ship, Asia Pacific Journal of Academic Research in Social Sciences, Vol. 5, 1-7

3. Amandeep Kaur, Prabhjot K. Dilawari (2017), A Study to Identify the Factors Affecting Employee Retention, International Journal of Science and Research, Volume 6 Issue 5

4. Ms Shahtaj Yousuf, Dr Danish Ahmed Siddqui,2019. Factors Influencing Employee

Retention: A Karachi Based Comparative Study on IT and Banking Industry, International Journal of Human Resource Studies, Vol. 9, No. 1

5. Syed Harris Syed Noordin, Nor Lelawati Jamaludin, Norina Ahmad Jamil, 2021, Factors Influencing Employee Retention; The Moderating Roles of Job Embeddedness in Ecommerce Logistic Industry, International Journal of Academic research in Business and social sciences, Vol. 11, No. 5, 2021, Pg. 617- 638

6. Dimitrios Chatzoudes, Prodromos Chatzoglou, 2022, Factors Affecting Employee Retention: Proposing an Original Conceptual Framework, International Journal of Economics and Business Administration Volume X, Issue 1, pp. 49-76

7. Zaid Bin Khalid, Naveed Iqbal Chaudhry, 2020, Factors affecting the employee retention in the banking sector of Pakistan, Pakistan business review, Volume 22 Issue 2

8. Pieter Schaap, Chantal Olckers, 2020, Relationships between employee retention factors and attitudinal antecedents of voluntary turnover: An extended structural equation modeling approach, SA Journal of Human Resource Management,

9. William D. Frye, Soonhwa Kang, 2019, What factors influence Generation Y's employee retention in the hospitality industry?: An internal marketing approach, International Journal of Hospitality Management,

10. Raminder Kaur, 2017, Employee Retention Models and Factors Affecting Employees Retention in IT Companies, International Journal of Business Administration and Management, Volume 7, Number 1

11. Yvonne Sishuwa, Jackson Phiri, 2020, Factors Influencing Employee Retention in the Transport and Logistics Industry, Open Journal of Social Sciences, 2020, 8, 145-160.

12. Tammana Mohapatra, Debasmita Nayak,2021 An Analysis of Factors Affecting Employee – Retention during Crisis of COVID -19, International Journal for Research in Engineering Application & Management, Vol-06, Issue-12

13. Dr. Mahesh VJ, Narmadha K R, 2020, Employee retention strategies in IT sector – a perceptual survey, Journal of Contemporary Issues in Business and Government Vol. 26, No. 2

14. Diwakar Singh, 2019, A Literature Review on Employee Retention with Focus on Recent Trends, IJSRST , Volume 6 ,Issue 1, [6 (1) : 425-431]

15. Harish K. Padmanabhan, Madhulika A. Sonawane, 2019, A study of Literature Review on Employee Retention, International Journal of Interdisciplinary Current Advanced Research, Volume-01 Issue-07 (39 – 42)

16. J. Pavithra, Thirukumaran, 2018, A study on employee retention with special reference at Philips electronics, Chennai, International Journal of Pure and Applied Mathematics, Volume 119 No. 12, (1523-1543)

17. T.S.Kumar, Dr.M.Kavitha, 2018, Employee retention- a real-time challenges in Indian IT sector - review paper, AJMR, Vol 7, Issue 6,

18. Mrs.Gayatri Bhauguna, Dr. S R Sharma, 2017, Retention as an issue in Indian software industry, International Journal of Research in Economics and Social Sciences, Vol. 7 Issue 10, 258 – 274.

19. Bodjrenou Kossivi,2016, Ming Xu, Bomboma Kalgora, Study on Determining Factors of Employee Retention, Open Journal of Social Sciences, 2016, 4, 261-268.

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A STUDY ON AWARENESS OF SAFETY ACTS AMONG PETROL BUNK EMPLOYEES IN TIRUCHIRAPALLI DISTRICTS

Deva Kumar S[1], Krishna Prakash M[2], Dr. Jawahar Philimis[3], Dr. Suseendar C [4]

Abstract
This paper is a study on awareness of safety acts among petrol bunk employee. A measure the awareness of safety acts for employee who work in petrol bunk in Tiruchirappalli districts. They can be measured as five types of petrol bunk in Tiruchirappalli districts. They are Indian oil petrol bunk, Hindustan petroleum petrol bunk, Bharath petroleum, Reliance petroleum, liquefied petroleum gas. Survey how to know about the safety acts in them workplace. Safety symbols and cautionary instructions displayed all around. Safety stickers developed for awareness on specific occasions. Safety stickers developed and distributed. Employee should be aware in the safety acts in petrol bunks.

Keywords: *Safety, Occupational, Awareness of Safety Acts, Employees, Petrol Bunks.*

Safety

Safety refers to the state of being safe,' or being protected from harm or other unfavorable outcomes. Safety can also refer to the management of known hazards in order to produce a favorable risk condition. "Stable state of an organization or place accomplishing what it's supposed to do?" is the definition of safety. Safety is defined as the absence of physical harm or damage to people's health, either directly or indirectly as a result of damage to properties or the environment.

Occupational safety

Occupational Health and Safety, sometimes known as Occupational Safety and Health, is a multi-disciplinary field concerned with the safety, health, and interests of people at work.

Occupational Safety and Health may protect coworkers, family members, and other individuals who may be harmed by the workplace environment.

Safety acts

The safety act protects providers of approved anti-

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terrorism technologies from legal accountability, whether they're protecting or serving the safety act's purpose. By offering liability protection, the goal is to encourage the development and deployment of effective anti-terrorism products and services.

During the operation and maintenance of the petrol station, hazardous contributing factors were recorded.

Hazards contributing factors recorded during operation and maintenance of petrol station.

- House keeping
- Transportation hazards
- Careless
- Fire
- Electrical fault
- Assorted cases
- Medical treatment cases

These factors occurs in Hazards for the employee workplace.

Petrol bunk

As a popular impression among a major section of India's population, petrol bunks are one of the most profitable businesses with goal returns. In India, there are five different types of petrol bunk

- Hindustan petroleum bunk.
- Indian oil petrol bunk.
- Essar petrol bunk.
- Bharath petrol bunk.
- Reliance petrol bunk.

REVIEW OF LITRATURE

Johnson & Umoren (2018): PPE awareness and use, hand washing practices, first aid box availability, and medical checks were all lacking (Oe & Qm, 2018). The independent petroleum marketer's organization and other stakeholders should endeavor to guarantee that filling station owners are responsible for their employees' health and safety.

M. Sam Mannan & Olga Reyes-Valdes (2016): There has been a lot of development in terms of developing technologies and researching themes that promote process safety. However, as the accidents we've reviewed illustrate, there's still a lot of work to be done in the areas of process safety education, research, and practice. The interaction of human process equipment with on-the-job learning resulted in even more negative outcomes and effects. Only when a sufficient number of skilled, trained, and competent inspectors are available can checkups have favourable outcomes(Mannan et al., 2016).

Mingkwan & Kitwattanavong (2013): Workers at gas stations need excellent health protection to avoid exposure to these harmful chemicals, and ambient levels of these compounds should be measured in their workplace on a regular basis to ensure that they are working in a safe environment. Increased levels of BTEX and carbonyl compounds in the ambient air near the petrol station are a result of increased fuel circulation(Kitwattanavong et al., 2013).

Marta Regina Cezar-Vaz & Laurelize Pereira Rocha (2012): the perceptions of gas station workers about physical, chemical, biological, and physiological risk factors in their work environment; the types of occupational accidents involving gas station workers; and the development of a socio-environmental intervention as a tool for risk communication to gas station workers. Occupational accidents are becoming more common, which allows for the perception of risk factors to be realized from the event to the worker(Cezar-Vaz et al., 2012).

Yuganti P Vaidya (2012): It was intended to test lung function in fuel pump personnel based on the duration of occupational exposure. We urge that other research be conducted in different places to back up our findings with more data, as well as studies recommending various preventative strategies for petrol pump operators (Hulke et al., 2012).

Deepak Kumar &T.S. Thakur & Chandra Prabha Bhargava (2011): Contract work is used all throughout the world and has been in use since the dawn of time. The contract workers have no direct contact with the top management. Work has a timeless quality about it. Work is both a byproduct and a requirement of factory work. Work is adequate to employ a significant number of full-time employees, and most businesses are run by regular males(Refineries, 2009).

Gana Godwin J (2010): Maintenance is a broad phrase that encompasses a wide range of tasks in many industries and working situations. Work equipment, personal protective equipment, and work procedures should all be given (et al., 2017).

D. Majumdar & C. Dutta & A.K. Mukherjee (2008): The exposure of workers at gas pumps in Kolkata, as well as the health dangers related with it. At the fueling station, data on ambient mono-aromatic hydrocarbons and carbonyls is gathered, and occupational exposures of filling personnel to mono-aromatics is investigated. Different fractions of VOCs are apportioned according to immediate source contributions using chemical mass balance (CMB) receptor models. Estimates of non-cancer health risk and integrated lifetime cancer risk are made as a result of employees' exposure to some hazardous VOCs. During the pumping and servicing of fuels, workers at petrol stations handle a variety of petroleum products. Risk evaluations for harmful contaminants are commonly employed in air pollution control operations(Majumdar (neé Som) et al., 2008).

G. S. Keretetse, & P. J. Laubscher (2008): Because of their potential neurotoxic and carcinogenic consequences, exposures should be carefully monitored and maintained under control. DNA damage increased and DNA repair ability reduced as a result of exposure to these low levels. The antioxidant capability of the group exposed to petrol VOCs reduced. The antioxidant capacity was harmed by exposure to petrol VOCs, resulting in higher oxidative stress in the exposed group (Keretetse et al., 2008).

Okafoagu Nneka C (2008): Only a few of them have a good understanding of the subject. The importance of firms implementing workplace safety procedures is underscored. Identify potential dangers in the workplace. To prevent them, put in place safety precautions. New staff should be trained. Retrain employees on safety precautions(et al., 2017).

Ozcan Arslan (2007): Chemical cargoes have a variety of characteristics, and many of them pose health and safety risks, which is a major concern for the tanker sector. Despite the latest navigational systems, accidents and mishaps occur in the maritime industry. Chemical tanker operations result in more mishaps and accidents than other types of ships as a direct result of the behavior of the chemicals being transported(Arslan & Er, 2008).

Snorre Sklet (2006): They help people comprehend the concept of safety barriers. The findings are useful for identifying, describing, developing requirements for, and comprehending the effects of safety barriers in the field of industrial safety (Sklet, 2006).

Yeshvandra Verma & S. V. S. Rana (2001): The phenol concentration of urine samples from petrol-pump personnel and dry cleaners in Meerut City

(India) was used to track benzene exposure. Alcohol, it is determined, can change man's sensitivity to benzene toxicity through changing his metabolism. A considerable portion of the population is exposed to benzene as a result of their work environment. The amount of phenol excreted in urine may be affected by the diet consumed as well as other factors such as smoking and alcohol consumption (Verma & Rana, 2001).

Mohan Das,S. K.Bhargava,A. Kumar,A. Khan (1991): Most of the symptoms and signs might be ascribed to petrol fumes and other environmental pollution, as measured by greater concentrations of benzene, sulphur dioxide, and photoionizable dust in the air near petrol stations. Workers who are exposed to petrol fumes exhibit a variety of clinical indications and symptoms that could be related to their work(Das et al., 1991).

Jouko suokas (1988): The use of safety analysis to ensure the safety of new and current industrial systems is becoming more frequent. The identification of accident contributors is one of the most difficult parts of safety analysis. Both safety analysis and accident investigations are complimentary ways to assessing accident risks associated with a system or activity(Suokas, 1988).

PROBLEM STATEMENT

There are various organizations using different risk assessment criteria currently then. Continual occurrences of hazards that can be present while operating and maintenance of PFS reveals flaws in these approaches. These danger factors have Possibility of producing undesirable circumstances at PFS. Therefore it is necessary to provide a framework for risk assessment that to help with health, priorities dangers and determine risk value in making decisions, safety and environmental experts.

OBJECTIVES OF THE STUDY

- ❖ To study the working environment to petrol bunk.
- ❖ To evaluate the safety measures available in a petrol bunk employee.
- ❖ To study the awareness on labor law of safety for petrol bunk employee.

RESEARCH METHODOLOGY

The term "research" refers to a search for information. It's also referred as as a scientific and methodical search for material information about a certain subject. Data analysis is a method of scientific enquiry. "A diligent investigation or inquiry, especially through quest for new facts in any sort of knowledge," according to the advance learner's dictionary of contemporary English.

Research Design

It's an observational research project. The goal of descriptive surveys is to gather specific details and factual information about a current phenomenon. In Tiruchirappalli District, a structured questionnaire survey was conducted in selected petrol bunk corporations.

Selection of samples

Total 106 respondents were selected from employees in various petrol bunk corporation in Tiruchirappalli District.

Sources of Data

In order to achieve the objectives of present study, relevant primary and secondary data was used.

Primary Data

Primary data was collected from customers with the help of structured questionnaire by personal visit and conversation.

Secondary Data

Secondary Data was collected from Books, Magazines, Journals News Paper and Websites etc. It was useful sources to designs scientific instrument (questionnaire) for Primary data.

Sampling Technique and Instruments

The 106 employees of Fuel Bunk Corporation in Tiruchirappalli District were chosen using a convenience slicing technique. The information for the questionnaire for the petrol Bunk Corporation in Tiruchirappalli District was also obtained by the researcher. For the study, both primary and secondary data were collected. The structured questionnaire was utilised to do this. The general information of the selected petrol bunk corporation in Tiruchirappalli District was gathered using secondary data from published sources such as annual reports and the website of the petrol bunk corporation in Tiruchirappalli District. The final questionnaire is divided into three sections. The first section includes demographic questions about area, gender, family kinds, marital status, age, educational qualification, and income, as well as present bunk experience and overall carrier experience. The second section contains seven elements that determine the petrol bunk company in Tiruchirappalli District, as well as respondents' preferences and promotional tactics. The second section contains three-point statements depending on the qualities, ranging from agree (represented by 1) to disagree (represented by 3).

DATA ANALYSIS AND INTERPRETATION

TABLE 1
ANOVA FOR WORKING ENVIRONMENT WITH AGE OF PETROL BUNKS OF RESPONDENTS.

ANOVA						
		Sum of Squares	Df	Mean Square	F	Sig.
Workenviavg	Between Groups	2.476	4	.619	1.526	.200
	Within Groups	40.967	101	.406		
	Total	43.443	105			

INFERENCE:

The significant value provided by SPSS is 0.200, which is less than 0.05, thus reject the null hypothesis. As a result, there is a significant variance in the working environment based on the age of the respondents' petrol bunks.

The working environment with the age of petrol bunks is divided into one category using the Duncan technique.

TABLE 2
ANOVA FOR SAFETY MEASURES WITH AGE OF PETROL BUNKS OF RESPONDENTS

ANOVA						
		Sum of Squares	**Df**	**Mean Square**	**F**	**Sig.**
Safetymeasavg	**Between Groups**	2.476	4	.619	1.526	.200
	Within Groups	40.967	101	.406		
	Total	43.443	105			

INFERENCE

The significant value provided by SPSS is 0.200, which is less than 0.05, thus reject the null hypothesis. As a result, there is a significant variation in respondents' awareness of acts based on their age of petrol bunks.

The Duncan technique divides the cognizant of acts with the age of petrol bunks into one category.

TABLE 3
ANOVA FOR AWARE OF ACTS WITH AGE OF PETROL BUNKS OF RESPONDENTS

ANOVA						
		Sum of Squares	**Df**	**Mean Square**	**F**	**Sig.**
Awareofactsavg	**Between Groups**	2.476	4	.619	1.526	.200
	Within Groups	40.967	101	.406		
	Total	43.443	105			

INFERENCE

Based on the result generated by SPSS, the significant value is0.200 and it's lower than0.05 so reject null hypothesis. Hence there's a significance difference in the aware of acts with age of petrol bunks of respondents.

By using Duncan method the aware of acts with age of petrol bunks is separated into one groups.

TABLE 4
t- TEST FOR WORKING ENVIRONMENT WITH GENDER OF RESPONDENTS

Group Statistics					
	Gender	**N**	**Mean**	**Std. Deviation**	**Std. Error Mean**
Workenviavg	**Male**	104	2.6635	.64778	.06352
	Female	2	3.0000	.00000	.00000

Independent Samples Test					
		Levene's Test for Equality of Variances		**t-test for Equality of Means**	
		F	**Sig.**	**T**	**Df**
Workenviavg	**Equal variances assumed**	3.327	.071	-.731	104
	Equal variances not assumed			-5.298	103.000

Independent Samples Test				
		t-test for Equality of Means		
		Sig. (2-tailed)	**Mean Difference**	**Std. Error Difference**
Workenviavg	**Equal variances assumed**	.466	-.33654	.46021
	Equal variances not assumed	.000	-.33654	.06352

INFERENCE

The result of Levene's Test for Equality of Variances (Homogenisity) indicates a significant value of 0.071, indicating that both groups are homogenous and that the t-test for equal variance should not be used. The female working environment has a mean value of 3.0000, whereas the male working environment has a mean value of 2.6635.

The difference between the two is only 33654 points, which is negligible. The significant value provided by SPSS is 0.000, which is greater than 0.05, thus accept the null hypothesis. As a result, there is no significant difference between the two means, i.e., male and female averages.

TABLE 5
t-TEST FOR SAFETY MEASURES WITH GENDER OF RESPONDENTS

Group Statistics					
	Gender	**N**	**Mean**	**Std. Deviation**	**Std. Error Mean**
Safetymeasavg	**Male**	104	2.6635	.64778	.06352
	Female	2	3.0000	.00000	.00000

Independent Samples Test					
		Levene's Test for Equality of Variances		**t-test for Equality of Means**	
		F	Sig.	T	Df
Safetymeasavg	Equal variances assumed	1.996	.161	.863	104
	Equal variances not assumed			.871	103.054

Independent Samples Test				
		t-test for Equality of Means		
		Sig. (2-tailed)	**Mean Difference**	**Std. Error Difference**
Safetymeasavg	Equal variances assumed	.466	-.33654	.46021
	Equal variances not assumed	.000	-.33654	.06352

INTERFACE

The result of Levene's Test for Equality of Variances (Homogenisity) indicates a significant value of 0.161, indicating that both groups are homogenous, and so the t-test for equal variance is not presumed to be used. Female safety measures have a mean value of 3.0000, while male safety measures have a mean value of 2.6635.

The difference between the two is only 33654 points, which is negligible. The significant value provided by SPSS is.000, which is greater than 0.05, thus accept the null hypothesis. As a result, there is no discernible difference between the male and female means.

TABLE 6
t-TEST FOR AWARE OF ACTS WITH GENDER OF RESPONDENTS

Group Statistics					
	Gender	**N**	**Mean**	**Std. Deviation**	**Std. Error Mean**
Awareofactsavg	**Male**	104	2.6635	.64778	.06352
	Female	2	3.0000	.00000	.00000

Independent Samples Test					
		Levene's Test for Equality of Variances		**t-test for Equality of Means**	
		F	**Sig.**	**T**	**df**
Awareofactsavg	Equal variances assumed	1.996	.161	.863	104
	Equal variances not assumed			.871	103.054

Independent Samples Test				
		t-test for Equality of Means		
		Sig. (2-tailed)	**Mean Difference**	**Std. Error Difference**
Awareofactsavg	Equal variances assumed	.466	-.33654	.46021
	Equal variances not assumed	.000	-.33654	.06352

INTERFACE

The result of Levene's Test for Equality of Variances (Homogenisity) indicates a significant value of 0.161, indicating that both groups are homogenous, and so the t-test for equal variance is not presumed to be used.

The female aware of acts has a mean value of 3.0000, whereas the male aware of acts has a mean value of 2.6635. The difference between the two is only 33654 points, which is negligible. The significant value obtained by SPSS is.000, which is greater than 0.05, thus accept the null thesis. As a result, there is no significant difference between the male and female means.

FINDINGS AND SUGGESTION AND SUMMARY

FINDINGS FOR ANOVA TEST

1. There's significance difference between working environment and age of petrol bunks of respondents, as the significance value 0.20 which is less than the 0.05, hence null hypothesis is rejected and the alternate hypothesis is accepted.
2. There's significance difference between safety measures and age of petrol bunks of respondents, as the significance value 0.20 which is less r than the 0.05 hence null hypothesis is rejected and the alternate hypothesis is accepted.

3. There's significance difference between aware of acts and age of petrol bunks of respondents, as the significance value 0.20 which is less than the 0.05, hence null hypothesis is rejected and the alternate hypothesis is accepted.

FINDINGS FOR t- TEST

1. There's no significance difference between working environment with gender of petrol bunks of respondents, as the significance value 0.000 which is lower than the 0.05, hence null hypothesis is accepted.

2. There's no significance difference between safety measures with gender of petrol bunks of respondents, as the significance value 0.000 which is lower than the 0.05, hence null hypothesis is accepted.

DISCUSSION/SUGGESTIONS

1. Provide a separate toilet facility for men and woman.
2. Avoid the female employee at work in night shift.
3. Provide a proper canteen for employee.
4. Refill the extinguishers regularly.
5. Provide googles to the employee.
6. Provide apron for the employee.
7. Provide hoods for employee.
8. Advise to use the gloves in working hours.
9. Instruct to clean the hands before take breakfast, lunch, dinner.
10. Provide ESI for employee.
11. Provide EPF for employee.
12. Dispose the waste oil from the working place.
13. Instruct employee to be aware of the acts.
14. Train employee for use of fire extinguishers.
15. Replace the expired medicine regularly.

CONCLUSION

This study has been focused on the Awareness of Safety Acts among the Petrol Bunk Employees in Tiruchirappalli District. The data were collected from the petrol bunk employees from various places is Tiruchirappalli District (north, west, south, east) including Kallakudi, Mambala Salai, Lalkudi, Irrungalur, Sirugannur, Junction, Musiri and Pettavaithalai. The collected data are analyzed using ANOVA TEST and t-TEST. Based on the objectives the researcher collected various socio demographic variables of the respondents and these variables has been interpreted with various dimension of Awareness of Safety Acts among the respondents of the study namely, working environment, safety measures and safety acts. Finding of this review that there is no significance difference and significance between the various variables of the study.

REFERENCE

1. Arslan, O., & Er, I. D. (2008). SWOT analysis for safer carriage of bulk liquid chemicals in tankers. *Journal of Hazardous Materials*, *154*(1–3), 901–913. https://doi.org/10.1016/j.jhazmat.2007.10.113

2. Cezar-Vaz, M. R., Rocha, L. P., Bonow, C. A., da Silva, M. R. S., Vaz, J. C., & Cardoso, L. S. (2012). Risk perception and occupational accidents: A study of gas station workers in Southern Brazil. *International Journal of Environmental Research and Public Health*, *9*(7), 2362–2377. https://doi.org/10.3390/ijerph9072362

3. Das, "Mohan, Bhargava, S. K., Kumar, A., Khan, A., Bharti, R. S., Pangtey, B. S., Raof, G. S., Pandya, K. P., & ". (1991). *Petrol Pump.Pdf*.

4. Hulke, S. M., Patil, P. M., Thakare, A. E., & Vaidya, Y. P. (2012). Lung function test in petrol

pump workers. *National Journal of Physiology, Pharmacy and Pharmacology*, *2*(1), 71–75.

5. Keretetse, G. S., Laubscher, P. J., Du Plessis, J. L., Pretorius, P. J., Van Der Westhuizen, F. H., Van Deventer, E., Van Dyk, E., Eloff, F. C., Van Aarde, M. N., & Du Plessis, L. H. (2008). DNA damage and repair detected by the comet assay in lymphocytes of African petrol attendants: A pilot study. *Annals of Occupational Hygiene*, *52*(7), 653–662. https://doi.org/10.1093/annhyg/men047

6. Kitwattanavong, M., Prueksasit, T., Morknoy, D., Tunsaringkarn, T., & Siriwong, W. (2013). Health Risk Assessment of Petrol Station Workers in the Inner City of Bangkok, Thailand, to the Exposure to BTEX and Carbonyl Compounds by Inhalation. *Human and Ecological Risk Assessment*, *19*(6), 1424–1439. https://doi.org/10.1080/10807039.2012.685814

7. Majumdar (neé Som), D., Dutta, C., Mukherjee, A. K., & Sen, S. (2008). Source apportionment of VOCs at the petrol pumps in Kolkata, India; exposure of workers and assessment of associated health risk. *Transportation Research Part D: Transport and Environment*, *13*(8), 524–530. https://doi.org/10.1016/j.trd.2008.09.011

8. Mannan, M. S., Reyes-Valdes, O., Jain, P., Tamim, N., & Ahammad, M. (2016). The Evolution of Process Safety: Current Status and Future Direction. *Annual Review of Chemical and Biomolecular Engineering*, *7*(March), 135–162. https://doi.org/10.1146/annurev-chembioeng-080615-033640

9. Oe, J., & Qm, U. (2018). Assessment of occupational hazards, health problems and safety practices of petrol station attendants in Uyo, Nigeria. *Journal of Community Medicine and Primary Health Care*, *30*(1), 47-57–57.

10. Okafoagu Nneka, C., Oche Mansur, O., Gana Godwin, J., Ango Jessica, T., & Yunusa Edzu, U. (2017). Knowledge of occupational hazards and safety practices among petrol station attendants in Sokoto metropolis, Sokoto State, Nigeria. *Journal of Occupational Health and Epidemiology*, *6*(3), 122–127. https://doi.org/10.29252/johe.6.3.122

11. Refineries, P. (2009). *Working conditions of the contract workers in Petroleum Refineries and Oil fields Ministry of Labour & Employment*.

12. Sklet, S. (2006). Safety barriers: Definition, classification, and performance. *Journal of Loss Prevention in the Process Industries*, *19*(5), 494–506. https://doi.org/10.1016/j.jlp.2005.12.004

13. Suokas, J. (1988). The role of safety analysis in accident prevention. *Accident Analysis and Prevention*, *20*(1), 67–85. https://doi.org/10.1016/0001-4575(88)90016-4

14. Verma, Y., & Rana, S. V. S. (2001). Biological monitoring of exposure to benzene in petrol pump workers and dry cleaners. *Industrial Health*, *39*(4), 330–333. https://doi.org/10.2486/indhealth.39.330

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A STUDY ON THE IMPACT LEVEL OF STRESS AMONG BANK EMPLOYEES' DURING THE PANDEMIC

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Abstract

The research looked into the effect of work stress on hand productivity. The goal of the study was to see how work-related stress affected the productivity of Tamil Nadu banking employees. It also identified specific factors that contribute to work stress in the banking industry. The target population is drawn from twenty Tamil Nadu banks. 148 bank employees in Tamil Nadu were selected using a statistical arbitrary slicing method. The device used to elicit information from the respondents was a questionnaire. Table and chance descriptive statistics were utilized to answer the investigation questions posed to lead the study, while regression and correlation, as well as the t- Test and one-way ANOVA method, were employed to test the study's exploration hypotheses. Workload, Job Satisfaction, Perceived Danger, Job Autonomy, Quality of Supervision, Organizational Support, Work-Family Conflict, Organization Commitment, and Job Stress are all stress-related factors that can be used to assess the impact of work stress. According to the conclusions of this study, there is a significant link between work stress and hand productivity in the banking industry.

Keywords: *Job Stress, Banking Industry, Epidemic of COVID-19.*

INTRODUCTION

The banking industry is the backbone of our state's and country's economies. Long working hours, an inefficient work schedule, a lack of job tone-acceptability, and employment difficulty are all part of the job description for banking representatives. Directors are under a lot of stress these days, especially in financial areas. Workplace weight can be a challenge, and stress can be both positive and detrimental at times. For an association, positive pressure promotes service, while negative pressure urges misfortune. Coronavirus is an outbreak that began in the year 2020 and is still ongoing. The restrictions had no effect on the chain of COVID-19 transmission. Working from home has both

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positive and negative implications. The beneficial effects aid the government in reducing COVID-19. The negative repercussions include an increase in the amount of conflict that occurs for representatives who need to telecommute. This is also a problem for workers to balance work and family time. A work-family conflict occurs when there is a conflict in a variety of ways between the pressing factors at work and family. Workplace pressure can be increased by the maturity of the woke-family clashes. Workers in the financial sector are facing new challenges, which has led many to believe that they are their own representatives. Working-ground stress is becoming an introductory issue for representatives, directors, and the general public. Workplace stress is an internal development that individuals may face on a daily basis. Job requests include job struggles, job inquiries, job corruption, and job oversimplification. Assignment requests are factors related to representatives' job/work for example, work plan, relationships between various assignments, working conditions, and work spread out.

REVIEW OF LITRATURE

1. **Masyhuri, Pardiman, Siswanto-Jurnal Keuangan dan Perbankan (2021)**
   Examine how a work-family conflict is mediated by a company's dedication to the job. Quantitative analysis of structural equation modelling using partial least squares can be used by the researcher. A questionnaire was used to collect data. The study was done via direct data gathering from employees via a Google Form and a questionnaire. Work-family conflict has an impact on employee job stress and organizational commitment. Smart PLS 3.0 was used to evaluate the data. In the examined, there are two steps that can be regarded (Algorithm and Bootstrapping). There are five different banks to choose from. 197 is a bank employee. It is suggested that job stress levels be compared before and after the pandemic. To find out what additional factors can affect job stress, add the other mediating variables. Respondent to the survey. It demonstrates an organizational commitment capable of mediating the tension between work and family life and job stress.

2. **Rukhshinda Begum, Ahsen Mobeen-European Scientific Journal (2020)**
   The banking industry is concerned with identifying decision-making flaws. They were also gathered through the analysis of the hypothesis statement. The information was gathered by a survey method using a questionnaire and a Google document, as well as an employee interview. A total of 112 employees from various financial sectors responded. Employees' working time was reduced during the pandemic due to lockdown, work pressure, fear of losing their jobs, and psychological stress. Number of employees available for telephone interviews over the length of the pandemic. Motivated by the financial gain from working in a dangerous environment. Attendance was provided to the bank employee at the bank's convenience.

3. **Arslan Khalid, Fang Pan, Ping Li , Wei Wang and Abdul Sattar Ghaffari-Frontiers in Public Health (2020)**
   Employees in the public and private banking sectors compare occupational stress, psychological capital, and job burnout. A cross-sectional survey was conducted in various banks across Pakistan. Data was collected from 1778 male and female bank employees using an adapted questionnaire that included the effort-reward imbalance scale psychological capital and the burnout inventory general survey. A cross-sectional study was done in Pakistan's Punjab province. The research was classified

as a descriptive study. The data was analyzed using SPSS, which included correlation, regression, and t-tests. The information gathered by Punjab's big five cities. A total of 1778 people responded to the survey. Investigate the results of employees working in other nations who are using the same model.

4. **Mishal Khosa,Shahibudin Ishaq, Bidayatul Akmal Mustafa Kamil- International Journal of Management Studies and Social Science Research (2020)**
Psychological Empowerment and Employee Engagement: A Relationship Motivation and employee engagement have a relationship. Psychological Empowerment and Occupational Stress have a link. Motivation and Occupational Stress have a relationship. There is a link between workplace stress and employee engagement. The Relationship between Psychological Empowerment and Employee Engagement is mediated by Occupational Stress. Occupational stress is a mediator in the motivation-employee engagement relationship. The frontline staff in Pakistan's banking sector were chosen by the researcher. The survey approach was used to fill out the questionnaire. Employee Engagement, Psychological Empowerment, and Motivation: Motivation, Occupational Stress, and Co-worker Support were used to gauge the results of this study. Smart PLS version 3 is used to evaluate data. Individual item reliability (outer loading), internal consistency reliability, convergent validity, and discriminating validity are all factors to consider when evaluating measurement models. The structural model, also known as the inner model in the PLS-SEM path model, describes the link between the exogenous and endogenous latent constructs. Employees on the front lines of Punjab's six major banks. The study's sample size is 1778 people. Another drawback of the current study was the lack of a longitudinal design and a self-reporting survey. Alternative methodologies, such as qualitative or focus group methods, are likely to be used.

5. **Muhammad Ehsan, Kishwar Ali- International Journal of Innovation and Economic Development (2019)**
Employee performance in the banking sector of Faisalabad, Pakistan, is affected by stress. The reasons for the banking sector's stress. Descriptive study design to accurately characterize the participant. The study's sample technique is convenient sampling. Non-probabilities are one of the categories of non-probabilities. To obtain data from responders, I created a questionnaire. SPSS (Statistical Package for Social Sciences) (Frequency analysis, Reliability Analysis, Regression Analysis, Correlation Analysis). The population is concentrated in an urban and semi-urban bank with a population of 50 people. The current study can be expanded from the district level to the state level, national level, and international level; the sample size can be raised; and additional factors that contribute to the occupational sector and approaches to successfully resolve lecturer stress can be investigated.

6. **Mohamed El-Hady Emam Salim, Alaa Abdel Wahed Aboel Maged Shams Eldine, Omar Omar Zidan, Mohamed Mahmoud Aboal Asaad-The Egyptian Journal of Hospital Medicine (2019)**
The prevalence of occupational job stress among banking personnel, as well as the risk factors for occupational job stress and interventions that may help to prevent occupational stress among banking employees. A survey of 568 banking employees in El-Mansoura City was undertaken. A cross-sectional study employing a standardised questionnaire was conducted, as well as an interventional study involving the use of a stress management health education intervention

programme. Six months after the intervention, an evaluation was conducted to determine the program's level of success. A survey of 568 banking employees in El-Mansoura City was undertaken. To improve understanding of organisational stress, future research should combine longitudinal designs with both objective and subjective measurements of stressors from a variety of sources.

7. **Mathangi Vijayan-Research Gate (2018)**
   Employees, workload, job security, and shift work are all affected by demographics. The elements that contribute to occupational stress are investigated, as well as their impact on job performance. From this research, a conceptual model based on the workload, job stability, and shift work can be created. This research took a qualitative method. Aavin, Coimbatore, can determine the population. The primary data was gathered using a questionnaire. Simple random sampling can be used to determine the study's sampling. T-Tests, correlations, and regressions were used in the analysis, which was done using SPSS Software. This study has a sample size of 100 people. The impact of occupational stress on employee performance can be researched on a larger population. Other factors include role conflicts, autonomy, inadequate pay, and so forth. Other variables, such as role conflicts, autonomy, low incomes, technological development, and so on, might be investigated in order to focus on job stress-free work-life balance management and treatments for job stress mitigation. Employee workloads in the organization can be lowered, and management can make attempts to allocate work effectively. Employees can be assigned to different shifts, which can help them maintain a healthy work-life balance. A job stress audit can be conducted on a regular basis to determine the source of job stress and to alleviate it. The company might host seminars and workshops to promote a healthy work-life balance.

8. **Manjunatha M K., and Dr. T.P. Renukamurthy-International Journal of Research - Granthaalayah (2017)**
   Theoretical considerations in stress management. Employee performance according to several study perspectives in relation to stress management. It could be made up of secondary information. The study was evaluated by many on-line publications, and data was collected by libraries. Variables: Types of stress, sources of stress, and stress findings in the banking business, technology has revolutionized the level of stress faced by employees. Workforce productivity is one of the most important variables in an organization's success. A productive employee is one who is healthy. Excessive work pressure and work life are the main causes of stress in the banking bussiness.

9. **Rohit Yadav-International Journal of Research (2017)**
   The amount of stress that employees are under. Employees exhibit stress-related symptoms. The variables that cause stress. The purpose of this research is to look into the effects of stress on employees. Make recommendations for stress management. Non-probability sampling techniques such as convenience sampling and snowball sampling are used in the study. About 200 samples of original data were acquired from various Public Sector Banks and Regional Rural Banks in India's National Capital Region. Data was collected through a questionnaire, Google Forms, an interview, and a discussion. Secondary data was gathered from publications such as periodicals, journals, websites, and reports. In the banking industry, the majority of employees are under stress. The personnel are not sufficiently motivated by their superiors.

Incentives, both financial and non-financial, are insufficient. Employees do not have enough authority to fulfil their responsibilities.

10. **Saumen Purkait.-International Journal of Advanced Research (2016)**
The percentage of bank employees that are stressed at work. The bank employee's quality of life at work. The methodology helps people overcome professional stress and have a better work life. The study's respondents were assumed to be banking employees in West Bengal. There were two categories of data that were considered. There are two types of data: main and secondary. They created a questionnaire to collect data from respondents on occupational stress and work life quality. The easy sampling was used to customize the sampling. The cross sectional study used a Likert scale for the questionnaire. The study's respondent is 90 years old. Banks may increase training and information transfer, as well as other programmers, to help people improve their living conditions. According to the findings, banking sector employees' occupational stress has a significant impact on their quality of work life. Role Overload, Role Conflict, Difficult Working Conditions, and Responsibilities have all had an impact on the quality of work life of banking sector employees in West Bengal, as they lack confidence in stability, growth possibilities, and contentment.

11. **R. M. Alagu Krithika, Prof. M. Robinson-IJIRST –International Journal for Innovative Research in Science & Technology (2016)**
The most common reasons of stress for women working in the banking industry. The link between the many aspects of workplace stress. The level of occupational stress experienced by female bank employees. The effects of work-related stress. 1. A research design might be a structure or plan that guides data collecting and analysis. The research was classified as a descriptive study. The results were calculated using SPSS and the chi-square test. Bank staff in 75 private and 75 public banks are women. The study's respondents are 150 female employees. Stress in the banking industry is mostly caused by an excess of job pressure and a work-life balance imbalance. Organizations can assist and encourage employees to take on positions that help them achieve this balance.

12. **Shavita Dhankar-International Journal of Applied Research (2015)**
Determine the degree of stress among bank employees. A bank employee is causing tension between the private and public sectors. Direct data collection among employees was used in the survey, which was obtained using a Google form and convenient sampling. In this study, there could be up to 12 variables. 1. There is an abundance of roles. 2. Uncertainty over one's role. 3. Conflicts of interest. 4. Unreasonable political and group pressure. 5. Personal accountability. 6. in the category of participations 7. Lack of control 8. Negative peer relationships 9. Poverty as a result of one's own actions 10. Low social standing 11. Difficult working conditions 12. Loss of profit 13. Occupational Stress as a Whole. Private bank number 20. Employee of Private bank-100, Employee of Public bank-100, Employee of Public bank-100, Employee of Public bank-100, Employee of Public bank-100, Employee of Public bank-100, Employee Researchers have only collected a limited sample of public and private banks a few times. The cost limitations were minimal in this investigation.

13. **Dr. Tulsee Giri Goswami-Indian Journal of Commerce & Management Studies (2015)**
Impact of occupational stress on employees'

performance at work place. The stressors at work, types of stress and impact work stress on individuals. The study was descriptive in nature. The respondent of study from 20 bank by sample size is 100 employee for the study. Lack of proper and healthy working conditions lead work tress among bank employee. Insufficient information and lack of career prospects at work place also cause low satisfaction and motivation. Poor performance and productivity due to low satisfaction and motivation. Stressors associated with job role.

14. **Santript Shukla, Dr. Ambalika Sinha-IOSR Journal Of Humanities And Social Science (IOSR-JHSS)(2013)**
    Employee turnover is a factor at a major bank. Employee turnover and its relationship. The research was conducted in a quantitative manner. Analysis of the work environment, career advancement, and job satisfaction. Respondents completed a questionnaire with a Likert scale. The divided half method's data collection dependability. SPSS was used to calculate the data (t-Test). The sample size for urban and semi-urban banks is 44 workers. The self-rating of banking employees was investigated in this study.

15. **Aliya Ahmad Shaikh, Memoona Akram, Muhammad Rizwan, Shakeela Kousar, Muneeb Malik-Journal of Public Administration and Governance (2013)**
    Job demand has a favourable impact on job stress. Conflict between work and personal life has a good effect on job stress. Job happiness and organisational commitment are inextricably linked. The study's nature might be classified as descriptive. Banking personnel can choose the population of interest. The study's sampling was termed as convenient sampling. The questionnaire survey created for this study was designed to assess the possibility of job stress, which might lead to counterproductive outcomes. Second, the goal of this study was to create a profile of responders with specified features that might be used for a variety of purposes. In the banking industry, there is a structural model for stress (private sector). Only 150 people were found to be genuine, while the remainder were rejected owing to invalid responses. After the data gathering phase was completed, the data was entered into an SPSS data sheet for analysis. The study's tools are the reliability test and regression analysis. The study's sample size is 230 people. The sample size was expanded, with a focus on including people from different parts of the world. Samples should be drawn from public sector banks as well as other organisations such as the health services sector, the IT business, the hotel and catering industry, and the education sector, among others.

16. **Suparn Sharma, Jyoti Sharma and Arti Devi-The IUP Journal of Organizational Behavior (2012)**
    A Logit Approach: Attempt to identify the individual characteristics that contribute to role stress among banking personnel "A pre-tested questionnaire was used to assess individual differences in role stress experienced by bank employees in the Jammu district. The two-sample t-test was used to see if there was a significant difference between the two groups of people." A sample of 80 employees from private banks in the Jammu region (India) were surveyed.

17. **Suparn Sharma, Jyoti Sharma and Arti Devi-The IUP Journal of Organizational Behavior (2012):**
    A Logit Approach: Attempt to identify the individual characteristics that contribute to role

stress among banking personnel "A pre-tested questionnaire was used to assess individual differences in role stress experienced by bank employees in the Jammu district. The two-sample t-test was used to see if there was a significant difference between the two groups of people." A sample of 80 employees from private banks in the Jammu region (India) were surveyed.

18. **Mohd Kamel Idris-International Journal of Business and Social Science (2011)**
The role stressors' long-term impacts. Examine the impact of workplace pressures on strain. The role stresses can be conceptualized to help with the review. They'll develop a theoretical framework and hypotheses. They created a questionnaire based on this research to collect data from respondents. The research was done using stratified sampling. Means, standard deviations, and correlations, as well as hierarchical regression analysis, were used in this investigation. They chose five Malaysian public universities based on data gathered by 549 academicians. The research could go in a methodological or contextual direction. Academics viewed perceived role conflict, such as a lack of resources, competing requests, or different working styles, as a danger to their well-being, causing pressure. Workplace resource deficiency, for example, disrupted work processes and job outputs in a direct and immediate manner. The second explanation is that role conflict may require a longer time lag before it has an effect on strain. It's possible that the apparent role conflict will take longer than six months to affect strain. The question can emerge as to why academics are more tolerant of role conflict over time than role overload and ambiguity. It's probable that the reason revolves around rewards and recognition. Academics who are experiencing role conflict have the option to work with restricted resources while also obtaining recognition and gratitude from the company. In the case of role ambiguity, however, the effect is more severe.

19. **Subha Imtiaz& Shakil Ahmad-International Review of Business Research Papers (2009)**
Determine the source of the stress, as well as its causes and consequences. Major Job Performance Predictors knowledge of job performance is one of the variables. Errors in the treatment process. Job satisfaction is a term used to describe how satisfied you are with your job. Expertise in your chosen field. The information was divided into two categories. There are two types of data: main and secondary. Medical personnel and house officers in the hospital industry in Rawalpindi/Islamabad assisted in gathering primary data. Medical officers and home officers in Rawalpindi/Islamabad were given the questionnaire to collect secondary data for this study. Qualitative data gathered from observations, semi structured interviews, articles, and a current research study were used to derive secondary data. The descriptive data tools used in this investigation were from SPSS (Regression, Correlation). 78 respondents provided appropriate responses, which is satisfactory.

20. **Kenneth S. Shultz , Mo Wang & Deborah A. Olson-Wiley InterScience (2009)**
The health consequences of playing a role that is under load versus playing a part that is overloaded. The demand–control model of job stress can be applied to both overload and underload scenarios, or merely overload. To see if there were any significant variations in the health outcomes related with role overload and role under load, Chi-square analysis were utilised. The hierarchical logistic regression study involved three phases for the three role load categories of workers. Data was collected

from a representative sample of approximately 16,000 working individuals from 15 western European countries, with approximately 1,000 people from each nation." 15 western European countries"include both self-report and biological measures to achieve a reliable assessment of perceived work stress"include both self-report and biological measures to achieve a reliable assessment of perceived work stress"include both self-report and biological measures to achieve a reliable assessment of perceived work stress The data used in this project is archival in nature.

RESEARCH METHODOLOGY

Research is common parlance referring to a search for knowledge. It's also known as scientific and systematic search for applicable information on a specific topic. In data research is an art of scientific investigation. According to advance learner's wordbook of current English, research mean "A careful investigation or inquiry especially through search for new fact in any form of knowledge."

RESEARCH QUESTIONS

1. What are the differences between role under load and role overload in terms of health outcomes?
2. Do overload and under load conditions fall under the purview of the demand-control model of work stress or only overload conditions?

THE OBJECTIVES OF THIS STUDY

- To find out workers of banking stress level.
- To analysis the occupational stress workers' impact of performance at bank sector.
- To find the Role overload, Job Satisfaction, Job stress.
- To determine the work family conflict, organisation commitment.

RESEARCH DESIGN

It's an experimental study. The purpose of descriptive surveys is to collect the details and factual information that describes an existing phenomenon. Survey through structured questionnaire has been made in selected of bank at the Tamil Nadu.

SELECTION OF SAMPLES

Total 148 respondents were selected from workers in several banks in Tamil Nadu.

Sources of Data

In order to achieve the objectives of present study, relevant primary and secondary data was used.

Primary Data

Primary data was collected from customers with the help of structured questionnaire by personal visit and conversation.

Secondary Data

Secondary Data was collected from Books, Magazines, Journals News Paper, Websites etc. It was useful sources to designs scientific instrument (questionnaire) for Primary data.

Sampling Technique

A statistical random sampling technique was used to select 148 workers of bank at the Tamil Nadu. Researcher had also got information for the questionnaire for bank at the Tamil Nadu. Both primary data and secondary data types were collected for the study. The structural questionnaire has been used for the purpose. The use of secondary data from the published sources like annual reports and website of bank at the Tamil Nadu, has been used for gathering the general information of the selected of bank at the Tamil Nadu. The final questionnaire consists of three parts. The first part consists of the demographic questions regards region, gender, types of family, marital status, age and educational qualification and income, experience of bank and total experience of his carrier.

The second parts include seven factors of questions determining the bank at the Tamil Nadu, preferences of the respondents and also promotional tools. The second part includes 5-point statement (ranging of strongly agree (represented by 5) to strongly disagree (represented by 1) which were based on the attributes.

Tools used for Analysis

1. t- Test.
2. ANOVA Test.
3. Correlation
4. Regression

DATA ANALYSIS AND INTERPRETATION

TABLE 1

ONE WAY ANOVA JOB SATISFACTION, JOB STRESS, ORGANISATION COMMITMENT BY EDUCATIONAL

		Sum of Squares	Df	Mean Square	F	Sig.
Job Satisfaction	Between Groups	4.246	3	1.415	.849	
	Within Groups	759.156	143	5.309		.849
	Total	763.401	146			
Job stress	Between Groups	21.319	3	7.106	.798	
	Within Groups	3006.000	143	21.021		.798
	Total	3027.320	146			
Organisation commitment	Between Groups	4.814	3	1.605	.809	
	Within Groups	712.492	143	4.982	Sig.	.809
	Total	717.306	146		.849	

INFERENCE

Based on the result generated by SPSS, the significance value is 0.849 and it's more than 0.05 so accept null hypothesis. Hence there's a no significance difference in the job satisfaction, job stress, organization commitment by educational.

TABLE 2

ONE WAY ANOVA JOBSTRESS ROLEOVERLOAD ORGANIZATIONALSUPPORT BY EXPERIENCE

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Job stress	Between Groups	91.905	2	45.953	2.254	.109
	Within Groups	2935.414	144	20.385		
	Total	3027.320	146			
Role overload	Between Groups	33.503	2	16.752	2.174	.117
	Within Groups	1109.776	144	7.707		
	Total	1143.279	146			
Organizational Support	Between Groups	22.040	2	11.020	1.445	.239
	Within Groups	1098.382	144	7.628		
	Total	1120.422	146			

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INFERENCE

Based on the result generated by SPSS, the significance value is 0.239 and it's more than 0.05 so accept null hypothesis. Hence there's a no significance difference in job stress, role overload, organizational support by experience.

TABLE 3
ONE WAY ANOVA JOB STRESS, JOB AUTONOMY, ROLEOVERLOAD BY WORKING HOURS

ANOVA						
		Sum of Squares	Df	Mean Square	F	Sig.
Job stress	Between Groups	20.990	1	20.990	1.012	.316
	Within Groups	3006.330	145	20.733		
	Total	3027.320	146			
Job Autonomy	Between Groups	2.853	1	2.853	.584	.446
	Within Groups	708.181	145	4.884		
	Total	711.034	146			
Role overload	Between Groups	8.744	1	8.744	1.118	.292
	Within Groups	1134.535	145	7.824		
	Total	1143.279	146			

INFERENCE

Based on the result generated by SPSS, the significance value is0.446 and it's more than 0.05 so accept null hypothesis. Hence there is a no significance difference in the job stress, job autonomy and role overload by working hours.

TABLE 4
REGRESSION ANALYSIS OF IMPACTS LEVEL OF STRESS BY AGE

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.200[a]	.040	.006	.838

ANOVA[a]						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	4.111	5	.822	1.172	.326[b]
	Residual	98.923	141	.702		
	Total	103.034	146			

INFERENCE

R is the correlation, its value is 0.200 and R square is degree of determination, its value is 0.040.

Based on the result generated by SPSS, the significance value is 0.326 and it's more than 0.05 so accept null hypothesis. Hence there is a no significance difference in the impacts level of stress by age.

TABLE 5
T- TEST FOR GENDER

One-Sample Statistics				
	N	**Mean**	**Std. Deviation**	**Std. Error Mean**
employee gender	147	1.41	.494	.041

One-Sample Test						
	Test Value = 0					Test Value = 0
	T	**Df**	**Sig. (2-tailed)**	**Mean Difference**	**95% Confidence Interval of the Difference**	**95% Confidence Interval of the Difference**
					Lower	**Upper**
employee gender	34.700	146	.000	1.415	1.33	1.50

INFERENCE

Levene's Test for Equality of Variances (Homogenisity) result shows that significance value that's 0.04 which means both groups are homogeneous group so t- test for equal Variance not assumed considered.

Here the mean value of working environment of female is3.0000 and that of male is the difference between the two is 33654 which is insignificance**.** Based on the result generated by SPSS, the significance value is 0.000 and it's lower than0.05 so accept null hypothesis. Hence there's no significance difference between the two means i.e. the average by male and female.

TABLE 6
CORRELATIONS BY IMPACT LEVEL OF STRESS

Correlations				
		Job stress	**Job Satisfaction**	**Role overload**
Job stress	Pearson Correlation	1	.178*	.459**
	Sig. (2-tailed)		.031	.000
	N	147	147	147
Job Satisfaction	Pearson Correlation	.178*	1	.293**
	Sig. (2-tailed)	.031		.000
	N	147	147	147
Role overload	Pearson Correlation	.459**	.293**	1
	Sig. (2-tailed)	.000	.000	

INFERENCE

The correlation between Z score and H Score is r = 0.459 and significant values is 0.000. This indicates that Z score and H Score aren't independent to each other. The value of r is0.459 so it's considered to be a strong correlation.

FINDINGS

There is proof that most workers report feeling stressed out at work and that they don't feel cared for by their bosses. As a result, stress is a problem that employees in the banking industry in Tamil Nadu have to cope with. Given that a small percentage of employees have voiced discontent with their workplace, there must be a mismatch between the employees and their working environment.

The majority of workers claimed that they did not make decisions, which may be one of the stress-inducing causes.

Most workers have little to no control over their jobs. If workers feel powerless in their careers, they may experience stress. Because the bulk of the employees are highly educated and competitive, it can be inferred that a lack of control over their jobs is stifling their technical skill, and the frustration they are feeling may be upsetting them. The bulk of the employees, who were young and very competitive, were in danger of burning out due to workplace problems.

Most workers had allowed themselves to be let go by their bank, which might have compromised their commitment to performance.

CONCLUSION

According to empirical research, work stress poses a serious problem for employees in the banking sector. It is imperative that concerns related to stress are regularly monitored in the workplace. Additionally, it is crucial to create a healthy environment in which employees can work effectively in addition to keeping an eye on the variables. The purpose of the study is to determine how employee performance in the banking sector is impacted by job stress. The factors that cause workplace stress and affect employee performance are drawn using the method. The factors that contributed to workplace stress included work overload, job satisfaction, perceived danger, job autonomy, and the standard of supervision. Other factors included organizational support, work-family conflict, organizational commitment, and job stress. Management, on the other hand, can take steps to reduce it. Organizations can minimize employee stress levels by restructuring roles to reduce burden, reduce role conflict, and reduce role ambiguity. Organizations should also provide counselling to employees so that they can acquire stress management skills to help them deal with the situation.

RECOMMENDATION

Based on the findings of the study, it is proposed that the following actions be implemented to assist workers of Tamil Nadu banks in managing and reducing stress at work. The causes of employee dissatisfaction in the workplace must be investigated by managers and directors. They must analyses their degree of knowledge and skills, as well as their ability to fulfil their deadline. They must come to an agreement on a performance contract so that they can provide employees with job maturity and control.

Managers should invite employees who believe they are being assigned jobs that are incompatible with one another to explain their responsibilities. They should organise a hand skill audit to assist in staff placement.

REFERENCE

1. Alagu Krithika M Robinson, R. M. (2016). A Study on Occupational Stress Among the Women Employees in Banking Sector at Trichy District. *IJIRST-International Journal for Innovative Research in Science & Technology*|, *2*(11),

817–820. www.ijirst.org

2. Begum, R., & Mobeen, A. (2020). Impacts of Pandemics on Economy - Focusing on the Measures and Employee Performance in Banking Industry of Pakistan during COVID-19. *European Scientific Journal ESJ*, *16*(16). https://doi.org/10.19044/esj.2020.v16n16p13

3. Dhankar, S. (2015). Occupational stress in banking sector. *International Journal of Applied Research*, *1*(8), 132–135.

4. Giri, G. . T. (2015). Job Stress and Its Effect on Employee Performance in Banking Sector. *Indian Journal of Commerce & Management Studies*, *VI*(2), 51–57.

5. Idris, M. K. (2011). Over time effects of role stress on psychological strain among malaysian public university academics. *International Journal of Business and Social Science*, *2*(9), 154–161. http://ijbssnet.com/journals/Vol._2_No._9_[Special_Issue_-_May_2011]/19.pdf

6. Imtiaz, S., & Ahmad, S. (2009). Impact of stress on employee productivity, performance and turnover; An important managerial issue. *International Review of Business Research Papers*, *5*(4), 468–477.

7. Khalid, A., Pan, F., Li, P., Wang, W., & Ghaffari, A. S. (2020). The Impact of Occupational Stress on Job Burnout Among Bank Employees in Pakistan, With Psychological Capital as a Mediator. *Frontiers in Public Health*, *7*(March). https://doi.org/10.3389/fpubh.2019.00410

8. Khosa, M., Ishaq, S., & Kamil, B. A. M. (2020). International Journal of Management Studies and Social Science Research. *International Journal of Management Studies and Social Science Research Antecedents*, *2*(1), 45–62.

9. M K., M., & Renukamurthy, T. P. (2017). Stress Among Banking Employee- a Literature Review. *International Journal of Research - GRANTHAALAYAH*, *5*(1), 206–213. https://doi.org/10.29121/granthaalayah.v5.i1.2017.1884

10. Masyhuri, M., Pardiman, P., & Siswanto, S. (2021). Factor Influencing Job stress during Covid-19: Empirical Evidence from Bank Syariah Indonesia. *Jurnal Keuangan Dan Perbankan*, *25*(2), 355–366. https://doi.org/10.26905/jkdp.v25i2.5537

11. Ranasinghe, V. (2021). *EFFECT OF GENDER DISCRIMINATION ON EMPLOYEE PERFORMANCE/ : MEDIATING ROLE OF OCCUPATIONAL STRESS IN BANKING SECTOR EFFECT OF GENDER DISCRIMINATION ON EMPLOYEE PERFORMANCE/ : MEDIATING ROLE OF OCCUPATIONAL STRESS IN BANKING SECTOR EMPLOYEES IN SRI LANKA. July*.

12. Salim, M. E.-H. E., Shams Eldine, A. A. W. A. M., Zidan, O. O., & Aboal Asaad, M. M. (2019). Occupational Stress among Banking Employees at El Mansoura City. *The Egyptian Journal of Hospital Medicine*, *76*(6), 4445–4451. https://doi.org/10.21608/ejhm.2019.44526

13. Santript Shukla, S. S. (2013). Employee Turnover in banking sector: Empirical evidence. *IOSR Journal of Humanities and Social Science*, *11*(5), 57–61. https://doi.org/10.9790/0837-1155761

14. Shaikh, A. A., Akram, M., Rizwan, M., Kousar, S., & Malik, M. (2013). The Impact of job stress: An imperative insight into the Banking sector. *Journal of Public Administration and Governance*, *3*(3), 294. https://doi.org/10.5296/jpag.v3i3.6223

15. Sharma, S., Sharma, J., & Devi, A. (2012). Role Stress Among Banking Sector Employees: A Logit Approach. *IUP Journal of Organizational Behavior*, *11*(3), 41–63. http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=78344896&site=ehost-live

16. Shultz, K. S., Wang, M., & Olson, D. A. (2010). Role overload and underload in relation to occupational stress and health. *Stress and Health*, *26*(2), 99–111. https://doi.org/10.1002/smi.1268

17. Vijayan, M. (2017). Impact of job stress on employees job performance in aavin, Coimbatore. *Journal of Organisation and Human Behaviour*, *6*(3), 21–29. http://www.publishingindia.com

18. Yadav, R. (2017). A Study on Stress among Employees in Banking Industry. *International Journal of Research in Humanities & Soc. Sciences*, *5*(7), 8–13. www.raijmr.com

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Resonating with the Consumer - A Case Study on Brand Resonance

Dr. Anita Saxena and Dr. Rinku Sharma

Forty one year old Sonal Oswal can't remember the time when she first started using Fair & Lovely—but it was somewhere in the 1990s; satellite television channels had opened the world of small-screen entertainment to Indian households and commercials of brands promising fair skin beamed at regular intervals to promise young women a fair looking skin. Oswal was probably in school when one such commercial of Fair & Lovely caught her fancy. For the next few years, she obsessively used tubes and tubes of the popular cream, wearing it every day to school, hoping to look fairer.

INFATUATION WITH FAIRNESS

Fair or light skin colour has fascinated Indians for ages. The concept of fair skin is embedded in the psych at a very young age coupled with sexual objectification. This is propagated by deep rooted beliefs such as (a) a person's value comes only from their physical appeal (b) physical attractiveness is equal to being desirable. The most powerful contributor to the sexual objectification are popular programs on mass media, targeted at children; and even toys conforming to contorted ideals of confidence, success and happiness. Children as young as five years old are conscious of an 'inferior dark/coloured' and 'superior white' status. As they grow up, these stereotypes only become more and more ingrained into their psyche. The racism gets internalised[2]. Advertisements suggesting a singular ideal for beauty; showing celebrities; film stars and successful people as being fair contribute to this problem, resulting in body dissatisfaction, and lower self-esteem[8]. Other brands besides Fair & Lovely, such as Olay Natural White, Nutrogena Fine Fairness, Garnier Light, that have been shown to give benefits of a fair skin, were endorsed by leading Bollywood divas such as Katrina Kaif, Deepika Padukon, and Priyanka Chopra, on prime time television commercials. So the message that was strongly driven home through the advertisements featuring celebrities.

This fixation with fair skin, and the resultant low self-esteem due to constant comparisons with "fair" people has led to prejudice and discrimination not only in India but all over the world.

To stay competent in the "marriage market" and the "job market"; young girls and women conform;

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and have a need to look fair. Equating fairness with beauty has been seen as an important consumer insight. It is this need that Hindustan Unilever Limited identified and has been serving profitably. The company had even drawn scrutiny for its promotions and advertisements featuring darker skinned women turning fairer on using the cream.

BACKGROUND AND HISTORY OF THE COMPANY

Hindustan Unilever Limited (HUL) is India's largest fast-moving consumer goods company with over 85 years of heritage in India on any given day, nine out of ten Indian households use HULs products. They are known for great brands, the positive social impact they create and their belief in doing business the right way.

With 50 plus brands spanning categories such as fabric solutions, home and hygiene, life essentials, skin cleansing, skincare, hair care, colour cosmetics, oral care, deodorants, tea, coffee, ice cream & frozen desserts, foods and health food drinks, the company is a part of the everyday life of millions of consumers across India. Its portfolio includes leading household brands such as Lux, Lifebuoy, Surf excel, Rin, Wheel, Glow & Lovely, Pond's, Vaseline, Lakmé, Dove, Clinic Plus, Sunsilk, Pepsodent, Closeup, Axe, Simple, Love Beauty Planet, TRESemmé, Brooke Bond, Bru, Knorr, Kissan, Kwality Wall's, Horlicks and Pureit.

The company has about 21,000 employees and has sales of INR 50,000 plus crores (financial year 2021-22). HUL is a subsidiary of Unilever, one of the world's leading suppliers of Food, Home Care, Personal Care and Refreshment products with sales in over 190 countries.

Forbes rated HUL as the most innovative company in India and number eight globally. Aon Hewitt recognises HUL as one of the best companies to work for, and it continues to be the 'Employer of Choice' in the FMCG industry across years.

In 2007, the Company name was formally changed to Hindustan Unilever Limited after receiving the approval of shareholders during the 74th AGM on 18 May 2007. On 17th October 2008, HUL completed 75 years of corporate existence in India. On 15th November, 2010, the Unilever Sustainable Living Plan was officially launched in India at New Delhi. HUL completed 80 years of corporate existence in India on October 17th, 2013. In 2022, HUL's turnover crossed the INR 50,000 Crore mark.

Pioneering Role of the Brand

Fair & Lovely was first launched in March 1975 by Hindustan Unilever (Hindustan Lever Ltd.at that time). It was the Toilet Preparations division of the company that launched the brand.

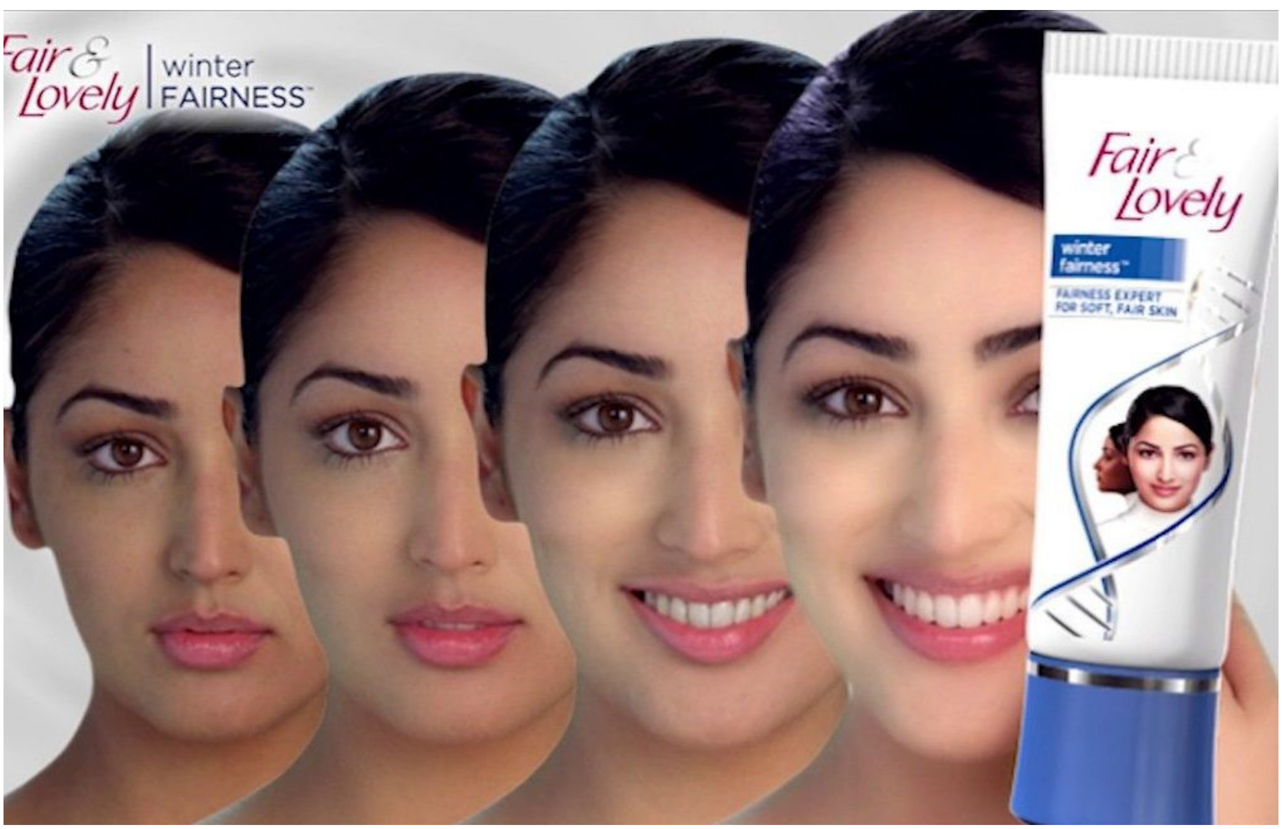
The controller of the division suggested coming up with a fairness cream, however the management was sceptical about the idea. The consumer research showed a big need- gap, therefore they decided to go ahead with it. The cream was test marketed in Tamil Nadu.

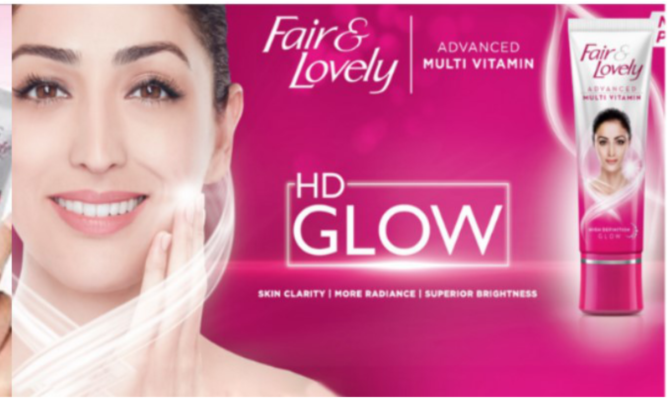
The product was developed scientifically and results were excellent; users found it to be soft and uniformly applicable. Promotion agencies were hired in many cities for launching the product pan India. Brand became more and more successful as time passed.

Evolution of the Brand

Fair & Lovely has been the world's most favourite fairness cream, as it ensured the selling premise of the brand; and keeps pace with the changing consumer needs and psychology but retaining its core benefit[5].

The brand was launched in India in 1978 and since then its promoting fairness tone through its product. Over a period of four decades Fair & Lovely evolved into one of the most successful brands in over three distinct phases. The first phase (Introductory Phase) saw the product been launched in 1976 to fulfil the need of girls and young women wanting to have fair skin in order to get a good husband. HUL promised to deliver fairer skin within 8 weeks to the user. The second phase (Evolutionary Phase) the brand addressed the young, self-confident and modern, college going girls. They considered home remedies to be old-fashioned and cumbersome. The third phase (Revolutionary Phase) addressed the needs of the achievers and outgoing girls to offer them emotional benefits of confidence to achieve personal and career success.





The "2020" Upheaval and the New Approach in Business

In the May of 2020; an incident that had racial discrimination/skin colour, as its basis, shocked everybody worldwide. George Floyd's died in Minneapolis, USA; due to the torture perpetrated by a white police officer, holding him down by placing his knee on his neck for almost nine minutes. The "Black Lives Matter" movement, was triggered by this incident.

As the movement gained traction; it compelled cosmetics companies worldwide to re-examine their product lines and marketing strategies[1].

In view of the "Black Lives Matter" movement and the subsequent public outrage created against discrimination based on skin colour, that compelled cosmetics companies worldwide to re-examine their product lines and marketing strategies HUL rechristened the cream as "Glow & Lovely" in July 2020[3]. This was done to align to the much more holistic definition of beauty, that women today want, as consumer research showed.

From the late nineties through early two thousands; advertisements of Fair & Lovely on television; portrayed women with darker skins as subservient losers; however when they applied "Fair & Lovely"; they were able to perform with aplomb in job interviews; execute presentations brilliantly at work; and upload their alluring pictures on matrimonial websites to successfully attract suitors[8].

They alluded to success as a derivative of "gori" (fair) skin resulting from applying their fairness cream. Later on they moved to the more politically correct concept of "nikhaar" (glowing skin).

In 2020; Sunny Jain, President of Beauty & Personal Care at Unilever, said: "We are fully committed to having a global portfolio of skin care brands that is inclusive and cares for all skin tones, celebrating greater diversity of beauty"[4].

"We recognise that the use of the words 'fair', 'white' and 'light' suggest a singular ideal of beauty that we don't think is right, and we want to address this."

"The brand has never been and is not a bleaching product," Unilever added.

In 2019; the consumer goods behemoth removed "shade guides" and "before-and- after pictures" from packaging; promotional material; and advertisements.

Resonating Across Generations

Fair & Lovely is a strong brand and occupy the leadership position in its product category as it has firmly established the brand imagery in customers' minds by strategically linking tangible and intangible (emotions and feelings) brand associations.

Fair & Lovely has created significant brand equity by putting right building blocks into place. It has brought about a paradigm shift to match changing consumer wants; thereby continuing to resonate with the consumer. The consumer remains loyal[5].

Consumers connect with Fair & Lovely as a brand that stands for 'Beauty that empowers a woman to change her destiny.[5]'

It was 1975 when HUL brought Fair &Lovely in India and gradually it was launched in major asian countries like Bangladesh, Malaysia, Thailand, Brunei, Indonesia, Srilanka, Singapore, and Pakistan.

Fair & Lovely is the leading skin-lightening cream for women in India. In 2003 it was rated as the 12th Most Trusted Brand in India by ACNielsen. In 2004 it was identified as a Super Brand. It holds as much as eighty percent market share of the total fairness cream market in India worth Rs.10000 crores, even today. It is still "Top of the Mind Recall".

Fair & Lovely ruled undisputedly in fairness cream market as it has reinvented itself constantly according to the changing consumer needs and preferences[6].

The brand differentiated itself by providing strength to the brand's meaning. Fair & lovely was imprinted in the minds of the consumer as a brand that offers 'fairness'. Unlike the later movers such as Garnier, Nutrogena, and Oil of Olay, who were also present in other categories such as hair care, eye care, lip care, and anti-aging; Fair & Lovely consistently offered the same benefits.

Consumers evaluate and form personal opinions about a brand, on the basis of these evaluations. Consumers also react and responds emotionally to a brand. Consumers found Fair & Lovely to be a safe and effective alternative for harmful bleaches that cause serious damage to the skin. Customers saw lot of functional benefits in the cream. Indian women could see a connect with the brand as they felt more confident of achieving once ambitions and aspirations.

There are significant intergenerational disagreements on such attitudinal items as timing of first birth, relative (consanguine) marriage, mode of mate selection, and attitude towards singlehood, where daughters' attitudes tend to be more modern. These intergenerational differences in marriage attitudes could be attributable to both ideational shift as well as intergenerational differences in socio-economic status including higher education, wage employment and urban origins of daughter generation.

So while Sonal Oswal was a committed and faithful user of the brand; her daughter Riya Oswal, continues to be faithful to the brand, but for different reasons. She is in constant disagreement with her mother, about she "settling down" early in life by finding a good husband; Riya wants to "settle down" by having a rewarding career first. For this she wants to be confident, acquire professional skills, and look well groomed.

The fact that even after the pressure that was exerted on cosmetics giants around the world back in 2020; which forced them to withdraw their fairness products range; or as in the case of Fair & Lovely, change the name to Glow & Lovely; the annual sales of the cream increased and grew to Rs. 4100 crores ($ 550 million) for the year 2020, in spite of the controversy[1]. It reinforces the fact that the consumers continue to have intense active loyalty to it. Thus, the cream has efficiently managed to ensure relevant differentiation and strengthened its brand value for the last 47 years; and continue to enjoy its first mover advantage, and maintaining its topmost position in its product category.

Questions:

Question 1: How has the cream shown brand resonance; and retained the mind share of the target consumers over the years?

Question 2: What role has advertising played in establishing a connection between brand values and the consumer?

Question 3: Has the name change caused a change in perception about the core benefits of the cream in the mind of the consumer?

ACKNOWLEDGEMENT

Special thanks to Dr. Hufrish Majra for the guidance provided in writing this case study.

Note: This case study can be used to teach Brand Resonance; and Ethics in Business

REFERENCES

1. What's in a name if it's all glow and lovely hul wouldn't mind. (2020, October 28). Moneycontrol.com. https://www.moneycontrol.com/news/business/whats-in-a-name-if-its-all-glow-and-lovely-hul-wouldnt-mind-6027671.html

2. http://www.unileverbrandsinfo.com/products/fair-and-lovely/cream/

3. Unilever's Fair & Lovely to get makeover after backlash. (2020, June 25). https://www.reuters.com/article/us-unilever-whitening-southasia-idINKBN23W0W9

4. https://csrbox.org/Impact/description/India_CSR_news_Unilever-evolves-skin-care-portfolio-to-embrace-a-more-inclusive-vision-of-beauty,-ending-references-to-whitening,-lightening-or-fairness_721

5. Fair and Lovely to drop ‘Fair’ from its name but will that be enough to appeal to new-age consumers. (2020), June 26). https://www.businessinsider.in/advertising/brands/article/fair-and-lovely-to-drop-fair-from-its-name-but-will-that-be-enough-to-appeal-to-new-age-consumers/articleshow/76631286.cms

6. https://www.hul.co.in/brands/beauty-personal-care/glow-lovely/

7. Asia-Pacific Marketing Review: Volume1, No.2, July-December 2012 pp.104-114, ISSN:2277-2057

8. Sharma. G & Mishra, N (2006) Advertising Ethics and the Entrepreneur-, Research Journal, Pathh, St Francis Institute of Management and Research, 2006, First Edition

9. Challapalli, Sravanthi, “All’s fair in this market”, The Hindu Business Line, http://www.thehindubusinessline.com/catalyst/2002/09/05/stories/2002090500040300.htm, September 2002, last accessed on: 6th October, 2009

10. “Fair & Lovely”, http://www.fairandlovely.in, last accessed on: 6th October, 2002

11. Aaker, David, 1991, “Managing Brand Equity”, Simon & Schuster, pp: 15

12. Keller, Kevin Lane and Moorthi, YLR, 2002, “Karma cola- Coke in India”, Working paper no. 186, IIM Bangalore

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Role of HR in Make In India: A study in Government Projects

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Abstract

The past years have witnessed a growth in the FDI inflow in India. India has also improved in the index of Ease of Doing business which makes India a lucrative destination of FDI. The 'Make in India' focus has resulted in increased growth on industrial activities contributing to higher GDP. The study aims to identify and analyses the role of human resources in ensuring the 'Make in India vision a reality with specific focus on Government projects. With increasing focus on strategic HR practices, there is shift in the role of HR professionals from being transactional to transformational. With Organisations increasing focus on reskilling and upskilling, HR professionals play a key role in capacity building. Broad areas of involvement of the HR department are discussed in the paper along with presenting a road map for effective management of human resources. Additionally, the role of HR in improving Corporate Governance and integrating project management skills are discussed.

INTRODUCTION

India has received FDI inflow worth US$ 358.30 billion which is 53 percent of the FDI reported in the last 20 years (US$ 681.87 billion). Steps taken to improve Ease of Doing Business include simplification and rationalization of existing processes. As a result of the measures taken to improve the country's investment climate, India jumped to 63rd place in World Bank's Ease of Doing Business ranking as per World Bank's Doing Business Report (DBR) 2020. This is driven by reforms in the areas of Starting a Business, Paying Taxes, Trading Across Borders, and Resolving Insolvency. Recently, Government has taken various steps in addition to ongoing schemes to boost domestic and foreign investments in India. These include the National Infrastructure Pipeline, Reduction in Corporate Tax, easing liquidity problems of NBFCs and Banks, policy measures to boost domestic manufacturing. Government of India has also promoted domestic manufacturing of goods through public procurement orders, Phased Manufacturing Programme.

Further, with a view to support, facilitate and provide investor friendly ecosystem to investors

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investing in India, the Union Cabinet on 03rd June, 2020 has approved constitution of an Empowered Group of Secretaries (EGoS), and also Project Development Cells (PDCs) in all concerned Ministries/ Departments to fast-track investments in coordination between the Central Government and State Governments, and thereby grow the pipeline of investible projects in India to increase domestic investments and FDI inflow. The activities under the Make in India initiative are being undertaken by several Central Government Ministries/ Departments and various State Governments. Further, Ministries formulate action plans, programmes, schemes and policies for the sectors being dealt by them. This Department does not maintain information on such formulations by the line ministries.

AGENDA OF MAKE IN INDIA

The main agenda of “Make in India” is to take Indian Manufacturing on an exponential growth trajectory. “Make in India” has been launched with the hope of increasing GDP growth and tax revenue in India. The project also expects to attract capital investment and technological advancement. The main idea of the project is to concentrate on the 25 different key sectors of the economy for skill enhancement and job creation. Some of the sectors of “Make in India” are Automobiles, Chemicals, Construction, Aviation, Biotechnology etc. Skill development and Job Creation in 25 key industries would be focused for the employment and development of our youth. Simply put, the idea is create higher investment and activity in the manufacturing sector. This on the one hand, will create job opportunities for the ever increasing workforce in our country and, on the other hand, will become the engine of growth for the Indian economy. It will be a win–win situation.

The government, according to the Make in India website, intends to increase the growth rate in the sector to 12-14% in the medium term in order to push the share of manufacturing to about 25% of the gross domestic product (GDP) by 2022 from the present level of about 16%. Encouraging global investors to make India an industrial hub is the prime feature of Make in India. Our Prime Minister has been urging investors that instead of FDI, they should set up industries in India. This will make India a destination for production as well as export of goods, all over the world. India has demand, democracy and demography. What we need is, investment, technology and exposure. Now, apart from other factors the success of Make in India depends to a great extent on the Human Resources attached to it.

India has a population of over 1.3 billion people. What is of great advantage to us is, that this population is quite young and thus we are a country of one of the largest young working populations in the world. But only the big number will not do. The people would have to be trained to increase their employability so that it can lead to economic growth. Investors would be interested in hiring skilled talent. What would be needed is a team of workers that can mould their talents to bring a large project to a successful end. Providing human resources to the Project to meet both permanent as well as short term work requirements will be the core area of human resource management.

The basic purpose of human resource management would be to make sure that the project has sufficient human resources, with the correct skill sets and experience, for the project to be successfully completed. Human Resource Management is in fact the end-to-end processes that this project will use to meet its requirements. The Human Resource Management is concerned with a broad span of areas, such as leadership, team building, and conflict resolution etc.

The key aspects which need to be taken care of would be-

i) To make an assessment of the resources required.
ii) The core skills and experience the resources are expected to have
iii) From where to pull the resources
iv) How long to retain the resources
v) How to develop resources according to the requirements of the Project
vi) How to cater to day to day management
vii) How to sustain the resources in long term.

Make in India Project requires general labour as well as specialized resources with competencies, skills and experiences to plug a variety of critical roles. While catering to the needs of human resources, different phases of its management need to be thoroughly considered.

1. Identification Phase-

At the Initiation Phase, the human resource component required to successfully run the project will have to be focused. This would include planning, acquisition, development, tracking and transition. What type of skills Project Make in India would need, in what number and how long would be some of the questions to begin with.

2. Planning Phase-

An exhaustive plan covering Project's life cycle from beginning to close out would be required. More over the plan will include a comprehensive estimate of human resource requirements for the in- service support organization which will provide operational support and maintenance services. The detailed Human Resource Management process at the Planning stage would require the following four activities in alliance with the Identification Stage. The focus on the project now will be on designing, building and implementing the recommended solution, as follows: Develop HR Plan; · Acquire Project Team; · Develop Project Team; and · Manage Project Team.

3. Developing Phase-

Detailed HR Management begins by developing the resources that will be used to execute the project. Staff planning is highly dependent on the development of a fully-elaborated Work Breakdown Structure (WBS) and project schedule, which means they must be created in concert. The Project Manager needs to analyze the tasks and deliverables described in the WBS along with the Project Scope statement, organizational policies, historical information from previous similar projects, available resources, and activity duration estimates to develop resource requirements. The aim is to determine which roles, skills and levels of experience match this work. The Project Manager will then estimate the number of resources appropriate for the tasks. By referencing the schedule, and in consultation with resource providers such as Competency Centres, the Project Manager will have to make adjustments based on availability and organizational capacity.

4. Acquiring Phase -

Staffing plan is normally finalized by this point. The staffing plan which is an output document of the HR Management Plan, captures details of the project's resource requirements. Staff for Make in India Project may be acquired from two sources: from employee organizations or by contracting with an external service provider. Employees can be acquired from either the business/client organization or from the project delivery organization. In extreme situations external resources may be acquired from an integrator as a single, integrated team, or from smaller service providers as individual resources.

5. Orientation Phase–

When new resources will join the project, the Project Manager will have to provide an orientation to the project. The orientation can involve discussing the following topics: · background of the project; · current status of the project; · specific job duties and expectations; · introduction to the existing staff; and · overview of the project processes, including time reporting, attendance, and status meetings.

6. Managing Virtual Teams -
Virtual teams in India would be composed of groups of persons with shared objectives who would come together to fulfill their roles with little or no time spent meeting face to face. Geographic dispersion can occur either within a region or in national projects across several regions. The management of virtual teams has its own set of unique challenges that would require additional communications and processes. It will be the responsibility of the Project Manager to try to take advantage of technological tools as well as some other options, to help bridge the physical gaps between team members.

7. Cultural Differences -
Most organizations under Make in India are likely to face highly diverse cultural environments. It would thus be necessary to take into account the cultural sensibilities of various team members when assembling teams and subsequently managing them.

8. Conflict Management and Resolution -
Conflict is both inevitable and to a degree desirable. Group thinking leads to bad decision making. Keeping the communication channels open helps confirm a team member's sense that his contribution is valued. The freedom to contribute a differing opinion ultimately leads to more creative decision-making. It is each team member's responsibility to manage conflict. However, when a conflict disrupts performance, it will be the Project Manager's role to mediate/arbitrate and ensure there is no breakdown in the team, or to escalate that intervention before performance is affected.

Prime Minister Narendra Modi had launched the "Make in India" campaign on September 25, 2014. The Project, which is, expected to create the job market for one million people each month is in itself a challenging task. Jobs need to be created in both organized and unorganized sectors. Efforts will have to be made in improving the unorganized sector. Notwithstanding apprehensions and criticism by few the early signs look exciting for the future of India. India should emerge as the "human resource capital" of the world, as Prime Minister said while launching the ambitious Skill India Mission aimed at promoting entrepreneurship and equipping 500 million Indians with skills by 2022 that would enable them to find jobs.

Prime Minister Modi believes that, if China is like a 'manufacturing factory' of the world, India should become the 'human resource capital' of the world. He wants that to be our target and we should lay emphasis on that. He is of the opinion that the world needs skilled people, and there is a huge job market in India. What we need is to map and train our youth accordingly. India has the potential to provide a workforce of about 4 to 5 crores to the world if the capabilities of the countrymen are honed through proper and dynamic training in skills.

Road Ahead - The world and technology is changing fast, and thus, we need to have futuristic vision and prepare plans for the next 25 years. There is the requirement for regular interaction between industry and technology experts now. There are several developed nations which have wealth but have shortage of human resources. India, in the near future, will be the only country that can cater to this requirement if proper skills are developed here, and this in itself will give boost to Make in India.

We need several corrections at our own level also. India s education system urgently needs to come of age. India would require millions of skilled workers. But the fact is that when people come out of Colleges or various Training Institutes, they are unemployable. We also need good and quality basic education. A country like India requires a strong Public-Private-Partnership (PPP) model to realize the true potential of „Make in India . Quality training institutes that are adequately staffed, with good infrastructure, adequate training tools and updated curriculum will now have to ensure that the students who graduate from such institutes are competitive. Such employees will obviously consume fewer investments on training.

A campaign like "Make in India needs to be planned well to ensure the demand and supply equations match. The success of the campaign also demands greater collaboration between the state and central bodies. The focus clearly now ought to be on generating specialised, skilled and a global workforce that can catapult India into a manufacturing hub.

The road ahead is unlikely to be easy, especially when the contribution of manufacturing to our economy has come down to around 15 per cent, from its peak level of 16.9 per cent.

- Outdated legislation needs to be replaced. The Government is working in this direction. It is also making efforts to reduce red tapism.
- A strategic framework needs to be in place with a clear roadmap across levels. Bureaucrats will also have to be given a free hand with their progress monitored closely.
- More infrastructure will definitely come up in the form of ports, surface transport for "Make in India to succeed.
- Corruption, our biggest hurdle in any progress, will now has to be stalled at all levels to ensure files move fast and do not gather dust for months together.

All this cannot be achieved easily. But strong determination makes everything possible. . No, doubt it is a long road ahead, but I am confident that "Make in India" will gradually become "**Made in India",** finally leading to "**Brand in India".**

HR ROLE TO IMPROVE CORPORATE GOVERNANCE

1. **Recognise that good governance is not just about compliance.**
   Boards need to balance conformance (i.e. compliance with legislation, regulation and codes of practice) with performance aspects of the board's work (i.e. improving the performance of the organisation through strategy formulation and policy making). As a part of this process, a board needs to elaborate its position and understanding of the major functions it performs as opposed to those performed by management. These specifics will vary from board to board. Knowing the role of the board and who does what in relation to governance goes a long way towards maintaining a good relationship between the board and management..

2. **Clarify the board's role in strategy**.
   It is generally accepted today that the board has a significant role to play in the formulation and adoption of the organisation's strategic direction. The extent of the board's contribution to strategy will range from approval at one end to development at the other. Each board must determine what role is appropriate for it to undertake and clarify this understanding with management.

3. **Monitor organisational performance**.
   Monitoring organisational performance is an essential board function and ensuring legal compliance is a major aspect of the board's monitoring role. It ensures that corporate decision

making is consistent with the strategy of the organisation and with owners' expectations. This is best done by identifying the organisation's key performance drivers and establishing appropriate measures for determining success. As a board, the directors should establish an agreed format for the reports they monitor to ensure that all matters that should be reported are in fact reported.

4. **Understand that the board employs the CEO.**
   In most cases, one of the major functions of the board is to appoint, review, work through, and replace (when necessary), the CEO. The board/CEO relationship is crucial to effective corporate governance because it is the link between the board's role in determining the organisation's strategic direction and management's role in achieving corporate objectives.

5. **Recognise that the governance of risk is a board responsibility**.
   Establishing a sound system of risk oversight and management and internal control is another fundamental role of the board. Effective risk management supports better decision making because it develops a deeper insight into the risk-reward trade-offs that all organisations face.

6. **Ensure the directors have the information they need.**
   Better information means better decisions. Regular board papers will provide directors with information that the CEO or management team has decided they need. But directors do not all have the same informational requirements, since they differ in their knowledge, skills, and experience. Briefings, presen-tations, site visits, individual director development programs, and so on can all provide directors with additional information. Above all, directors need to be able to find answers to the questions they have, so an access to independent professional advice policy is recommended.

7. **Build and maintain an effective governance infrastructure**
   Since the board is ultimately responsible for all the actions and decisions of an organisation, it will need to have in place specific policies to guide organisational behaviour. To ensure that the line of responsibility between board and management is clearly delineated, it is particularly important for the board to develop policies in relation to delegations. Also, under this topic are processes and procedures. Poor internal processes and proce-dures can lead to inadequate access to information, poor communication and uninformed decision making, resulting in a high level of dissatisfaction among directors. Enhancements to board meeting processes, meeting agendas, board papers and the board's committee structure can often make the difference between a mediocre board and a high performing board.

8. **Appoint a competent chair**
   Research has shown that board structure and formal governance regulations are less important in preventing governance breaches and corporate wrongdoing than the culture and trust created by the chairperson. As the "leader" of the board, the chairperson should demonstrate strong and acknow-ledged leadership ability, the ability to establish a sound relationship with the CEO, and have the capacity to conduct meetings and lead group decision-making processes.

9. **Build a skills-based board**
   What is important for a board is that it has a good understanding of what skills it has and those skills it requires. Where possible, a board should seek to ensure that its members repre-

sent an appropriate balance between directors with experience and knowledge of the organisation and directors with specialist expertise or fresh perspective. Directors should also be considered on the additional qualities they possess, their "behavioural competencies", as these qualities will influence the relationships around the boardroom table, between the board and management, and between directors and key stakeholders.

10. **Evaluate board and director performance and pursue opportunities for improvement** Boards must be aware of their own strengths and weaknesses, if they are to govern effectively. Board effectiveness can only be gauged if the board regularly assesses its own performance and that of individual directors. Improvements to come from a board and director evaluation can include areas as diverse as board processes, director skills, competencies and motivation, or even boardroom relationships. It is critical that any agreed actions that come out of an evaluation are implemented and monitored. Boards should consider addressing weaknesses uncovered in board evaluations through director development programs and enhancing their governance processes.

If you've found these tips helpful, need more assistance and don't know where to start? Complete our Governance Action Plan questionnaire and receive a customised report with recommendations on how to improve your governance today.

PERFORMANCE MANAGEMENT IN GOVERNMENT

Performance management in the public sector is a hot topic at the moment.

This is particularly true in emerging economies like South Africa, where moaning about public goods and governmental services like the military, law enforcement, infrastructure, public transit, education and healthcare is somewhat of a national pastime.

Go on - you know it's true. You probably had a nice big rant about the SAPS or education minister around a braai or vegan tapas platter in the last month at the very least.

To be fair, the South African public sector does have its challenges. Everything from skills development to procurement and service delivery needs to be fine tuned.

As a user of public sector services, you are not alone in feeling this way. According to a recent survey in public sector officials themselves also feel that there is room for improvement.

The exact quote says that 'public sector officials are less likely than their private-sector counterparts to agree that their organisation's current performance management has a positive impact on individual employee performance'.

The good news is that performance management in the public sector can be addressed...

With a focussed, employee-centric approach, there are certain tried-and-tested methods that can improve the things that are driving citizens up the wall at the moment.

The exact quote says that 'public sector officials are less likely than their private-sector counterparts to agree that their organisation's current performance management has a positive impact on individual employee performance'.

The good news is that performance management in the public sector can be addressed…

1. **Leverage the right kind of performance metrics.**

   The only real way to improve the state of performance management in the public sector is to get a clear idea of the current state of problems and processes, and to set future goals.

   Transparency is key and performance metrics should be chosen and communicated clearly so all role-players are attuned to the success of the process.

   Functional silos should be broken down to establish meaningful metrics that are suitable to the tasks at hand. After all, if you measure the strength of a fish on its ability to climb a tree, the yardstick is never going to be in favour of the fish.

   The data used to measure success should also be well organised - a flood of information will drown out any usable information, and a lack of data will only lead to frustration.

2. **Boost engagement with stretch targets.**

   Stretch targets that are in line with overarching company vision are a great tool to help employees reach for optimal performance. This goes beyond the traditional, non-aspirations objectives that normally form part of the game plan of most public sector institutions.

   By assigning stretch targets that tap into the personal motivators of each staff member, and tying it back to the overall objectives of the business at large, managers can help employees perceive the importance of pushing themselves to contribute to the wellbeing of the team while enjoying a personal sense of achievement at the same time.

3. **Get savvy on the digital front.**

   Using digital platforms to share information is another great way to keep employees motivated. When KPIs and stretch targets are visible to the whole crew, it affects real change in the way people work. It motivates employees to pay attention to these metrics and fosters a healthy sense of competition. Additionally, using a platform that incorporates gamification elements can encourage employees at all levels of the business to share performance-related information in real time.

4. **Offer incentives and support**

   Aside from conducting regular performance reviews to ensure that public sector employees have the opportunity to correct their trajectory if required, managers should also lay the groundwork of an ongoing motivational dialogue at the hand of incentives and other means of support. Employee recognition and reward is one of the simplest ways to boost the type of behaviour you want to see among your team members.

   By mapping out incentive plans in alignment with a company's vision and mission, organisational leaders set the scene for achieving high levels of performance.

   User-friendly platforms have been tailored to make this an absolute breeze. By combining the power of goal-based and values-based recognition. It also acts as a hub of social recognition and engagement, enabling people to establish connections and build relationships around shared values and common purpose.

5. Embrace more agile methodologies.

By utilising more agile methodologies, managers can help to boost performance improvement at the hand of fast-moving project review cycles.

A clear timeline and support from top management is an imperative if collaboration among relevant departmental stakeholders need to improve. There is likely to be a lot of resistance to change, so it helps to introduce elements of agility systematically, starting with smaller groups rather than rolling it out across an entire organisation all in one go.

6. Focus on skills building

To sustain improved performance in the public sector in the long run, HR and senior management need to focus on capacity building. Without this critical foundation in place, the whole process grinds to a halt.

Start by filling skills gaps in the most important functional areas. This may require the sharpening of existing skills, a change in the way that work is done, or broader capacity-building programs that seek to reskill or upskill entirely. By involving employees in organisational transformation in this way, government agencies set themselves up for success.

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Impact of New Technologies on Customer Experience in the Retail Sector

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Abstract

With retail businesses rapidly transforming, organisations offering genuine multi-channel experience are able to develop a competitive edge and resilience. AR/VR technologies provide retail organisations with a new tool to adapt to the new retail model. These technologies also enable firms to improve customer experience and adapting to the changing customer buying pattern. The study aims to examine trends that retail organizations may consider while adopting AR/VR and analyze the impact of these new technologies on customer experience among Generation Z. Based on Wolfinbarger & Gilly (2003) eTailQ Experience Model, the study makes an effort to provide an understanding of AR/VR technologies on customer experience. The findings provide evidence that the need for Amplified enjoyment and Personal Innovativeness are they driving factors among Gen Z for accepting or using AR/VR technologies while buying. The Pull-Push-Mooring (PPM) theory has been the underlying theoretical framework while developing and testing the hypothesis. The finding provide some interesting insights to retail Organisations on factors they need to consider before contemplating to implement new technologies.

Keywords: *Resilience, AR/VR in Retail, Customer Experience and Gen Z buying*

1. INTRODUCTION

Improving Customer Experience and delight has become the focus of organizations especially in the retail sector. Retail Organisations are exploring new ways to customer empowerment in the changing digital and technological environment (Batra, 2019). The retail sector contributes to 10% of the GDP and hence it is a sector of strategic importance from economic, social and management perspective. The recent crisis and need for maintaining social distance have re-defined customer behavior and shopping pattern. The need for contactless shopping has forced firms to think of new ways to offer

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product experiences to customers. However, developing trust in this new channel remains a challenge for Organisations who are adopting it or considering it as an extension of their current physical and digital channel (Wang, et. al, 2021). With the growth of 4G and 5G mobile technologies, firms are adopting Augmented and Virtual reality systems to provide convenience, enhance consumer involvement and imagery for higher sales (Shankar, 2021). A report by Infosys (2019) indicated that AR/VR Technologies are creating revolutionizing customer experience in the retail sector. Adaptability is the cornerstone of building organisational resilience to deal with challenging situations and ensure existence and success.

Resilient Organisations look for innovative ways to cope with change and adapt their business (Aldianto, et. al, 2021). As retailers are considering how AR/VR can impact the experience of their customers, a combined analysis if adopting AR and VR systems is very relevant to the current situations and examine how firms are building resilience to improve customer experience. This paper examines customer perception on using AR/VR systems and its impact on their shopping experience (Chandan, 2021). Young buyers, represented by Generation Z (born between 1995 to 2010), constitute the most tech savvy segment for the retail industry and are also willing to choose retailers who implement green and sustainable practices (Dabija, Bejan and Dinu, 2019). The study attempts to address the important questions that firms are trying to seek answer, how does innovative technologies such as AR and VR impact customer experience on generation Z which will influence their purchase decision.

The objectives of the research are:

a) Examine trends that organizations consider while adopting AR/VR systems in the retail sector.
b) Analyze the impact of new technologies such as AR/VR on customer experience among Generation Z.
c) Identify future research agenda related to challenges associated with AR/VR implementation in the retail sector.

2. LITERATURE REVIEW

Business and Industries are making huge investments in the new technologies such as AR/VR to bring a new experience and meet expectations for the E-commerce consumers. More importance to seamless customer experience is emphasized specially keeping Gen Z in mind as they are the biggest segment who does online shopping. (Sugiyama and Andree, 2011).

While Venkatesh et al.'s (2003, 2008) Unified Theory of Acceptance and Use of Technology (UTAUT) provide the theoretical explanation with regards to adoption and acceptance of new technologies it is important to examine this theory in the contemporary context beyond perceive ease of use and perceived usefulness. This study examines dimensions of switching intention based on the pull-push-mooring (PPM) theory. This theory helps to understand why do individuals consider moving from one environment to other. It has been used in the area marketing to understand the rationale of switching from one service or service provider to other (Kim, Choi and Choi, 2019; Yang, Cui and Chong, 2020).

2.1 Customer Experience

Lemon and Verhoef (2016) conceptualized customer experience as a customer journey with the firm over time: from pre-transaction (including search) to transaction to post-transaction. In each stage and substage, customers interact with firms through various touchpoints (Lee et al., 2018; Shankar, 2014).

With respect to customer experience research has also explored the dimensions of internal and subjective experiences which are evoked by these touchpoints for a so-called "Brand experience". In the research paper we will argue that, as brand-related stimuli, technologies can evoke different experience dimensions and thereby can create experiential value (Hoyer, Et Al 2020).

The eTailQ Experience Model by Wolfinbarger & Gilly (2003) provides a comprehensive understanding of customer experience dimensions. The model captures four key dimensions of customer experience associated with perceived ease of in terms of navigation, Fulfillment/reliability, transparency and security.

Understanding the usage of AR/VR contents in the retail sector and its impact on Customer experience will help firms to justify their investments in these technologies.

2.2 New Technologies: Virtual Reality (VR) and Augmented reality (AR)

The VR technology stimulates user experience in a computer - simulated virtual environment by generating realistic images. VR lets the user observe, move around, and also lets them interact with the virtual objects. They can evaluate among different products, make a choice among them and pick the best one which they feel and put them in their virtual store. But this whole experience depends on the quality of 3D images, the resolution of the screen and the head - mounted device with which the virtual environment is created. (Lombart, et al, 2020).

The term "Real Environments" (RE) refers to the reality itself. This comprises views of an honest to goodness scene that are either coordinate or indirect (through a video show). (Milgram & Kishino, 1994). Virtual Worlds (e.g., Second Life) are continuous virtual settings open 24 hours a day, seven days a week, that permit clients to be spoken to by avatars to form, play, and connected in genuine with other avatars. (Penfold, 2009; Schroeder, 2008).

Virtual reality (VR) is a computer-generated environment in which the user can explore and interact, triggering real-time simulation of his or her senses and offering a sensory immersion experience (Guttentag, 2010). Example- The video game Pokémon Go has picked up around the world consideration, highlighting its capacity to supply customers with exceptional experiences. AV, which super imposes real-world components on virtual universes, has gotten less consideration. (Rauschnabel, Rossmann, & tom Dieck, 2017)

2.3 Augmented Reality (AR)

Augmented reality (AR) real-time use of information in the form of text, graphics, sound and other visual enhancements integrated with real-world objects. It is this "real world" thing that separates AR from something that is not real. AR integrates and adds value to user interaction with the real world, as compared to simulation. (Hayes, 2020)

Augmented actuality (AR) is a technologically advanced real-world model created using digital visual features, music, or alternative sensor stimuli. It is a common practice among mobile phone companies and business applications.

In augmented reality, there is integration of real world and virtual information (Lamantia, 2009), and the elements of live view in the real environment are augmented by computer-generated sensory inputs such as audio, video, and graphic data. AR provides online shoppers with a meaningful experience, thereby reducing purchase risk (MacIntyre et al., 2001). The goal of AR is to provide tools that can evaluate available products by reducing the lack of touch and feel when shopping online and providing sufficient product information (Lu and Smith, 2007).

2.4 Factors affecting intention to use AR/VR content

Based on the Pull-Push-Mooring (PPM) theory, pull factors are the conducive factors that influence individuals to adopt a new experience (Yang, Cui and Chong, 2020). The findings of Kim, Choi and Choi (2019) indicated that experienceability, and amplified enjoyment are positive factors and impact intention of customers to use AR/VR content. Experienceability is the extent which customers can experience real-world products in a virtual environment and have a dynamic experience. It provides a three-dimensional experience to users. Amplified enjoyment is the individual's experience of a human–computer interaction which is subjective and hence a major factor of individual differences. It indicates the relative enjoyment perceived by the customer or user. Personal innovativeness, is the voluntary intent to adopt AR/VR content and accept new technology. The more the user is innovative the more there will be willingness to adopt innovative technologies (Kim, Choi and Choi, 2019)

Based on the above analysis the following hypothesis are proposed:

H1: *Experienceability in an AR/VR environment has a positive impact on Customer Experience*

H2: *Amplified enjoyment in an AR/VR environment has a positive impact on Customer Experience*

H2: *Personal innovativeness* in an AR/VR environment has a positive impact on Customer Experience.

Based on the above analysis and literature review the following theoretical model is proposed:

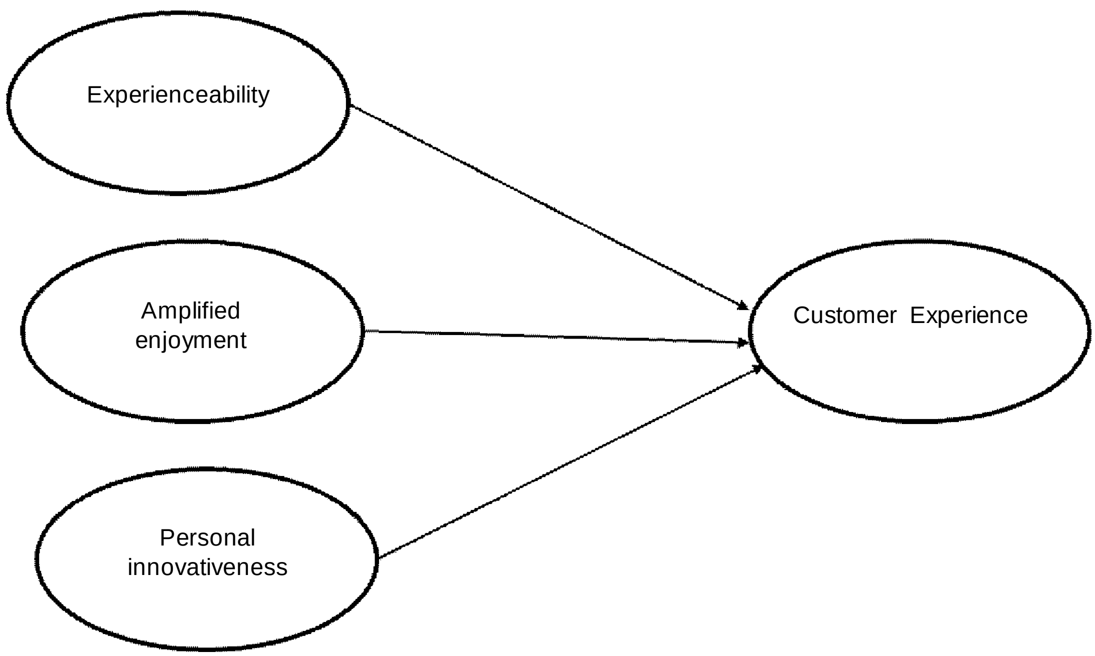

Figure 1: Proposed model to examine positive factors of AR/VR on Customer Experience

2.5 Gen Z, their characteristics and expectations

Gen Z are referred to as the most application friendly and Tech-Savvy generation and also the members of Gen Z have been growing and are expected to become the largest consumer segment by 2025. So, the business and sectors need to plan their strategies keeping the gen Z in mind. They need to develop their marketing strategy in which the new technologies such AR, VR and MR will play a major role. These technologies will help the business to change the behavior and perception of the Gen Z and also give them a whole unique experience in shopping. (McCoy, Lindsay; Yuan-Ting, Wang, 2021)

Gen Z expects the brand to give them the best possible shopping experience and the impact of these services will shape their perception towards the brand. These retailers need to understand the characteristics of Gen Z so they can develop their marketing strategies around it. Gen Z are already in the habit of shopping for apparel from various E-commerce sites, so if new technologies are used to enhance their experience, it will not only help to build a long-term relationship with them but also get E - Loyalty for them. (Jin, Yoon, Ma; Niehm, Linda S, 2006)

3. RESEARCH DESIGN

The research design adopted for the study is descriptive in nature. Statistical analysis in SPSS was carried out to test the hypothesis. Full Text and Peer-reviewed Scholarly Journals relevant articles during the search stage for analysis, four databases namely ProQuest, EBSCO, Emerald Insight and Google Scholar were identified and used.

Data was collected among students and working professionals who were within the target age group who would classify as generation Z.

4. METHODS

Multi-items scales used in previous studies were adapted to measure the variables of the study. Experienceability and Amplified enjoyment was measure using 5 items scale each; and Personal innovativeness was measure using a 3-items scale adapted by Kim, Choi and Choi (2019). Customer Experience was measured using a 5-item scales based on Wolfinbarger & Gilly (2003) eTailQ Experience Model. The 4-item scale was modified to capture the engagement level in an AR/VR environment.

5. RESULTS

The total sample size was 69. The demographic data reveals that 36.20% of the respondents were female and 63.80 were male. 14.5% of the respondents were in the age group of 16 to 20 and 85.5% between 21 to 25 years. 79.7% has experience an AR/VR environment in the past. Among the respondents who had experience of using an AR/VR experience has used their smartphones for the same.

The primary analysis comprised of computing the correlations among the four latent constructs of the proposed model to assess multicollinearity issues. The reliability analysis of the scales used were carried out before proceeding with the hypothesis testing. Table 1 indicates the Cronbach's Alpha values of the scales used for the study.

Table 1: Cronbach's Alpha values of the scales

Scale	Items	Cronbach's Alpha
Experienceability	5	0.785
Amplified enjoyment	5	0.833
Personal Innovativeness	3	0.638
Customer Experience	5	0.862

The Kaiser-Meyer-Olkin measure of sampling adequacy was 0.882.

The theoretical model proposed based on the literature review, was tested through the pilot study. The model summary indicated that the model explained 72% (Adjusted r square value=.724) of variance in organizational resilience based on the same.

Table 2 indicates the p and estimate values computed using SPSS for testing the hypothesis.

Table 2: Beta values and T Value

Hypo	Independent	Dependent	Beta	T value	Sig.	Result
H1	Experienceability	Customer Experience	.124	.973	.334	Not Supported
H2	Amplified enjoyment	Customer Experience	.412	3.265	.002	Supported
H3	Personal Innovativeness	Customer Experience	.376	3.224	.002	Supported

6. DISCUSSION

The study examined positive factors of AR/VR systems on customer experience. Based on the findings of the study, H1 is reject indicating that Experienceability which captures dimensions associated with high level of interaction, ease of use, convenience shopping in an AR/VR environment to their shopping experience. The data provides support for H2 and H3 indicating that 'Amplified Enjoyment' and 'Personal Innovativeness' had a significant influence on their experience while using an AR/VR environment.

The results of the study imply that just being able to experience the product in an augmented environment does not influence, reliability, transparency and a feeling of security as a shopping experience. Amplified enjoyment and personal innovativeness were the key factors that impacted customer experience. The findings draw attention that while implementing AR/VR capabilities on their website and mobile apps they must focus on offering exciting components for trials and making the shopping experience innovative. The study finds support in the findings of Lee, Kim and Choi (2019) and Kim, Choi and Choi (2019) suggesting the customers adopt virtual environment for being innovative and enjoyment more compared to usefulness.

7. CONCLUSION

The theoretical model proposed and tested can be used by future researchers with larger sample size to increase business resilience based on their strategic objectives. The framework proposed positive and conducive factors having an impact on customer experience, based on the PPM theory, the impact of pull factors on customer experience would provide additional insights on understanding why customers would not adopt AR/VR systems by retailers. They can provide a conceptual framework on developing organisational resilience by adapting to the changing preferences of young customers. A comparative study among different target segments, can help firms to examine, how they can develop a competitive advantage by educating customers to use new technologies. With the development of 5G mobile networks, new technologies are emerging and they have the potential to alter the retail landscape. Retailers must continue to examine, what smart distancing technologies can add value customers. Some product categories are most suitable for AR/VR demonstration and some are not specially in the service segment. These product categories have their unique challenges. While we assume that Generation Z are more tech savvy, there is a need for more empirical evidence on causal impact of the drivers of technology adoption and the impact of customer experience of AR/VR environment on actual sales. These are some of the future research areas identified by the authors based on the literature review. (Aldianto et. al, 2021; Chandan, 2021; Kumar, 2021; Shankar et. al., 2021)

REFERENCES

1. Aldianto, L., Anggadwita, G., Permatasari, A., Mirzanti, I. R., & Williamson, I. O. (2021). Toward a business resilience framework for startups. Sustainability, 13(6), 3132.

2. Batra, M. M. (2019). Customer experience: trends, challenges, and managerial issues. *Journal of Competitiveness Studies*, 27(2), 138-151.

3. Chandan, T. (2021). EXPLORATION OF AUGMENTED REALITY AND VIRTUAL REALITY IN THE RETAIL INDUSTRY. International Journal of Modern Agriculture, 10(2), 431-442.

4. Dabija, D. C., Bejan, B. M., & Dinu, V. (2019). How sustainability oriented is Generation Z in retail? A literature review. *Transformations in Business & Economics*, 18(2) experience. Journal of Teaching in Travel & Tourism, 8(2–3), 139–160.

5. Flavián, C., Ibáñez-Sánchez, S., & Orús, C. (2019). The impact of virtual, augmented and mixed reality technologies on the customer experience. Journal of business research, 100, 547-560.

6. Guttentag, D. A. (2010). Virtual reality: Applications and implications for tourism.

7. Havíø, D. (2017). A comparison of the approaches to Customer Experience Analysis. Economics and Business, 31(1), 82-93.

8. Hoyer, W. D., Kroschke, M., Schmitt, B., Kraume, K., & Shankar, V. (2020). Transforming the customer experience through new technologies. Journal of Interactive Marketing, 51, 57-71.

9. Kumar, H. (2021). Augmented reality in online retailing: a systematic review and research agenda. International Journal of Retail & Distribution Management.

10. Lee, J., Kim, J., & Choi, J. Y. (2019). The adoption of virtual reality devices: The technology acceptance model integrating enjoyment, social interaction, and strength of the social ties. Telematics and Informatics, 39, 37-48.

11. Lee, L., Inman, J. J., Argo, J. J., Böttger, T., Dholakia, U., Gilbride, T., ... & Tsai, C. I. (2018). From browsing to buying and beyond: The needs-adaptive shopper journey model. Journal of the Association for Consumer Research, 3(3), 277-293.

12. Lemon, K. N., & Verhoef, P. C. (2016). Understanding customer experience throughout the customer journey. Journal of marketing, 80(6), 69-96.

13. Lombart, C., Millan, E., Normand, J. M., Verhulst, A., Labbé-Pinlon, B., & Moreau, G. (2020). Effects of physical, non-immersive vir-

tual, and immersive virtual store environments on consumers' perceptions and purchase behavior. Computers in Human Behavior, 110, 106374.

14. McCoy, L., Wang, Y. T., & Chi, T. (2021). Why Is Collaborative Apparel Consumption Gaining Popularity? An Empirical Study of US Gen Z Consumers. Sustainability, 13(15), 8360.

15. Milgram, P., & Kishino, F. (1994). A taxonomy of mixed reality visual displays. IEICE Transactions on Information and Systems, 77(12), 1321–1329.

16. Penfold, P. (2009). Learning through the world of second life—A hospitality and tourism

17. Rauschnabel, P. A., Rossmann, A., & tom Dieck, M. C. (2017). An adoption framework for mobile augmented reality games: The case of Pokémon Go. Computers in Human Behavior, 76, 276–286.

18. Schroeder, R. (2008). Defining virtual worlds and virtual environments. Journal of Virtual Worlds Research, 1(1).

19. Shankar, V. (2018). How artificial intelligence (AI) is reshaping retailing. Journal of retailing, 94(4), vi-xi.

20. Shankar, V., Kalyanam, K., Setia, P., Golmohammadi, A., Tirunillai, S., Douglass, T., ... & Waddoups, R. (2021). How technology is changing retail. Journal of Retailing, 97(1), 13-27.

21. Taufik, D., Kunz, M. C., & Onwezen, M. C. (2021). Changing consumer behavior in virtual reality: A systematic literature review. Computers in Human Behavior Reports, 3, 100093. Tourism Management, 31(5), 637–651.

22. Wang, X., Wong, Y. D., Qi, G., & Yuen, K. F. (2021). Contactless channel for shopping and delivery in the context of social distancing in response to COVID-19 pandemic. Electronic Commerce Research and Applications, 48, 101075.

23. Wolfinbarger, M., & Gilly, M. C. (2003). eTailQ: dimensionalizing, measuring and predicting etail quality. Journal of retailing, 79(3), 183-198.

24. Yang, H. H., Cui, R., & Chong, W. Y. (2020). Customers' housing-switching behavior in Chongqing, China: A conceptual framework from the perspective of pull-push mooring theory. INTI JOURNAL, 2020(47).

25. Jin, Y., Ma, & Niehm, L. S. (2006). Service expectations of older generation Y customers: An examination of apparel retail settings. *Managing Service Quality, 16*(6), 620-640.

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