





On

"DIGITAL TRANSFORMATION OF BUSINESS - THE WAY FORWARD"

Organized on 16 March, 2019

## **Editorial Board**

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Dr. Sharad Kumar, Dean and Remsons Chair Professor for Management Research

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Excerpts of INAUGURAL SPEECH

Mr Krishna Kejriwal (CMD, Remsons Industries Ltd.)



Chief Guest, Mr. Krishna Kejriwal, Chairman and Managing Director Remsons Industries delivered his insightful keynote speech on changing business strategies to keep pace with the speed of digitisation. He opinionated that in the midst of inevitable disruptions and exponential changes, the businesses need to scale up their skill sets through innovation *to drive the change and not to be driven by the change*. He talked about SAP, CMD and Cloud Computing. He brought to the notice the benefits of digitization in terms of time, expense and man power saving as well as bringing system transparency. He also pacified the so called fear of manpower retrenchment, as he said that there is no substitute of human brain and some of the human traits like- creativity, imagination, emotion cannot be done by machines. He concluded his speech with the advice of embracing the transformative change by converting challenges into opportunity.

# Excerpts of the Report of Chief Convenor and Remsons Chair Professor Dr. Sharad Kumar, Dean Academics, DSIMS

Dr. Sharad Kumar as Chief Convenor, welcomed all to the 6th Remsons International Conference on Digital Transformation of Business-The Way Forward.

He said that **Digital transformation** is the deep transformation of business and organizational activities, processes, competencies and models to fully leverage the changes and opportunities of a mix of digital technologies and their accelerating impact across various segment of society in a strategic and prioritized way, to meet present and future needs.

He reflected the fact that the digital technologies, like- mobile, cloud, Artificial Intelligence, IoT, blockchain and more – are creating unprecedented levels of paradigm shift and fundamentally changing business strategies. To succeed in this disruptive digital transformation environment, organisations need to offer compelling new experiences, establish new focus, build new expertise and put smart to work and remain relevant and competitive.

He informed that this conference is being organized under the aegis of Remsons Centre for Management Research at DSIMS, which focuses on developing contemporary and usable research in various areas of Management.

He acknowledged that this Centre is set up to bring academic relevance to industry practices with the help of the generous donation from Remsons Group of Companies. It is set up by Late Shri Vishva Prakashji Harlalka in the memory of his mother Smt. Radhadevi Harlalka.

# Excerpts of KEYNOTE SPEECH

# **Dr. N. Rajendran,**Chief Technology Officer, National Payments Corporation of India

Dr. Rajendran highlighted on the issue of Payment Digitalization. He deliberated on several issues of digital payments, like- direct benefit Transfer (DBT), Rupay, Immediate borrowing through UPI, Artificial Intelligence (AI) and Machine Learning (ML). He informed the various functions performed by NPCI through its digital platform. Regarding the digital security, two fifty parameters need to be validated to authorize a transaction to the right person, he said.

# Excerpts of Panel Discussion

There was a Panel Discussion by a combination of esteemed Panelists of different field related to digitization. The experts in the panel were Mr. Vijay Chugh, Former Principal Chief General Manager, RBI; Dr. Mahesh N Juttiyavar, Senior Manager, CISO; Mr. Amit Sheth, Co-Chairman, AurionproSolutions Ltd; Mr. Hanuman Tripathi, Chairman Hashtashy Digital and CA Sudha Bhushan, Head- IA Advisory, Taxpert Professionals. With the able moderation by Dr. Sharad Kumar, the panel discussion brought lot of new insights to the audience.

**Mr. Hanuman Tripathi** reflected his views on Social Media Marketing, He was of the opinion that digital Marketing is creating a level playing field and pushing people out of their leadership position or monopolization stature. He claimed that digital marketing is a boon for small businesses and B2B where conversion rate is as high as 25%-30%, which is significantly high. He also asserted that Influential Marketing and referencibility is a Brahmastra of Digital Marketing.

Regarding the merits of Fin Tech, **Mr.Amit Seth** also opinionated along the same line of Mr. Tripathi about easy accessibility of tools, reduced barriers to entry and rising consumerism.

**Mr. Vijay Chugh** a veteran regulatory banker explained Ten Commandments of business digitization. As a part of G-20 and leading nation in digital economy front amongst Asia, India could build up its strength on crucial settlement system like- CDMI, RTGS and NEFT, he informed.

**Dr. Mahesh Juttiyavar** discussed the infrastructure requirement and the related regulatory perspective for digitization. Amidst the threat of breaches, hacking and malware, the need of the hour is to build a secure and insulated system for financial transactions, he said.

**CA Sudha Bhushan** expressed her views on taxation in cross border digital transaction. With the challenges posed by digitization, an altogether new business model has emerged and in this regard she discussed about the Equalisation Levy, Base Erosion and Profit shifting Plans and some new sections of E-Commerce policies.

## From Editor's Desk Dr. Sumana Chaudhuri, Associate Professor, DSIMS

Under the aegis of Remsons Centre for Management Research, DSIMS organized 6th International Research Conference on 16 March 2019. The conference is themed at, **Digital Transformation** of **Business.** The conference was inaugurated by Shri Krishna Kejriwalji, Chairman , Remsons Industries ltd, amidst the august gathering of Shri Ashok Saraf, President Rajasthani Sammelan and Chairman DSIMS, Dr. N. Rajendran (CTO, NPCI) and other senior delegates from the corporates and academia. The aim of the Conference is to capture new environment and opportunities setting new expectations, competition and challenges faced by industry in terms of Sustainability, Growth and Corporate Governance.

After a rigorous blind review by senior academicians, a total of 17 papers were presented on the above theme, in various functional domains of Management.

The Conference was an overwhelming success, attracting delegates and speakers from Mumbai as well as other reputed B –Schools across India. It has enabled the academicians, researchers and practicing managers to share their research findings, issues, concerns, doubts and insights for the future vis-à-vis specific domains of knowledge and practice. We hope that conference has not only provided great intellectual and social interactive platform to the participants, but also has given new perspectives from concrete facts. As a Convener, I am deeply privileged to present the Conference Proceedings and hope that this compendium of research papers will be found useful by the researchers, industry practitioners and policy makers.

## SESSION SCHEDULE 16 March, 2019

# Track I 14.00 Hrs to 16.00 Hrs

**Venue: 621** 

Session Chair- Dr. B.K.Bhoi

SR.NO	TIME	AUTHOR	TITLE	
1	14	Dr. Richa Sharma & Ms.Pradnesha Sakpal	Study of Smart HR Hybrid Competency in Industry 4.0	
		Ms.Prabhneet Saluja &	An Empirical Study to Explore the	
2	14.12	Dr. Padma Singhal	Brand Positioning Strategies in Personal Care Products	
		Dr. Dinesh D. Harsolekar	A Model To Mitigate Stress Levels in	
3	14.24	& Mrs. Merlyn Michael D'souza	the Digital Age	
		Ms. Sneha Pingle	A Study on Digitalization of	
4	14.36 Dr. Chandrashekhar Kaushik		A Study on Digitalization of Matchmaking for Marriages in India	
5 14:48		Devaki Nadkarni &	Chatbot: Managing the Customer	
3	14.40	Dr. Ritu Sinha	Service Experience	
6	15.12	Prof Anthony Colaco	Organizational Ambidexterity Challenges for Digital Transformation	
7	15.24	Prof. Himanshu Vaidya, Dr. Arati Kale & Dr. Deepa Rohit	A Study on Determinants of Attitude towards the Online Video Streaming Services in India	
8	15.36	Dr. Deepa Rohit and Prof Gayatri Magi	Determinants of the Usage Intentions towards Mobile Wallets: An Empirical Study	

# Track II

# 14.00 Hrs. to 16.00 Hrs

**Venue: 623** 

# Session Chair- Dr. Debesh Patra

SR.NO	TIME	AUTHOR	TITLE
1	14:00	Dr. Ravindra Dey	Impact of Digitalization and Technological Advancement on Human
2	14:12	Ms. Ayushi Gupta Dr. Sarita Vichore	Resource Function Fundamental Analysis of Portfolio Management Services
3	14:24	Ms. Svetlana Tatuskar	Impact of Brand Equity on Earnings Efficiency of Indian Private Sector Banks- an Empirical Analysis
4	14:36	Ms.Charlotte Agarwal & Dr. Ajay Agarwal	Digital Transformation of Human Resources
5	14:48	Ms. Riya Brahmbhatt Prof. Pooja Goswami	Study of AI And EI Tools In Talent Acquisition
6	15:00	Dr. Dhanashree Potey	A Study on How Digital Payments have Revolutionized the Customer Experience
7	15:12	Mr.Aditya Dhanuka, Ms.Abhilasha Bohra	Binge-Watching: Web-Series Addiction mongst Youth
8	15.24	Ms.Kinjal Jethwa & Dr. Sarika Jain	Role of Work-Family Conflict on Job Satisfaction and Turnover Intention – A Study of Hospitality Employees
9	15.36	Ms. Sayali Shelar	Impact of Digitalisation on Efficiency of the Working Capital Finance Process & Financial Performance - A Study of Kotak
		Dr. Sharad Kumar	Mahindra Bank Limited

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## Study of Smart HR Hybrid Competency in Industry 4.0

#### Richa Sharma

Associate Professor& Area Chair HR, CIMR

#### Pradnesha Sakpal

First Year Student, Master of Management Studies, CRKIMR

#### **ABSTRACT**

The Rapid Industrial revolution and advancement in robotics, big data, and artificial intelligence will be having a far-reaching effect on various functions of an organization specifically on HR. HR professionals need to evolve technological changes in their job to support functions, innovation, and creativity in their organization. The advent of industry 4.0 has led to a constantly evolving, too fast pace and complexly interwoven world of connections, simulations and algorithms emphasizing the focus on the high level of Emotional Intelligence and the requirement of hybrid skills by the employees and the HR professionals. Inspired by these the paper tries to study how technology will change the future role of HR and the skills required by the future HR professionals and the various EQ Competencies & skills i.e. personal competencies & human-to-human abilities. And to study how the HR professional /manager need to develop and integrate their various hybrid skills such as people expertise and data science skill to make smarter, informed and strategic business decisions.

Keywords: Smart HR, Industry 4.0, Hybrid Competency, Tech smarter, Emotional Intelligence

#### INTRODUCTION

Industry 4.0 often known as the 4th industrial revolution promises smart digital technologies. It represents how these smart technologies will not only change the way how human resources will work but will influence the way organization functions and will be completely redefining work marked by the emergence of innovative technologies such as automation, artificial intelligence, cloud computing and the internet of things. state that with the advent of automation and artificial intelligence HR professionals can focus on a more strategic role rather than an administrative task for these the HR needs to be very adaptive with the fast-changing pace. All HR function have two aspects transformational and transactional were in the transactional will be replaced by automation to carry the repetitive redundant ask while the transformational still need to be carried by the HR in the organization (The economic times, 2018). Study state that it will provide these professional an opportunity to focus on more critical business functions rather than repetitive ask which can be taken over by machines. The future of the HR professional will be more inclined towards the advisory function such as counseling and motivating the employees. Technology will not make HR function defunct it will just take away the repetitive task and to survive HR professionals need to upgrade and reskill their competency themselves and need to consider it as an opportunity rather than a threat. There is an emerging need for HR Professionals to have a different kind of smartness. Emotional Intelligence (personal competencies and human to human abilities). The today work environment is becoming agile and dynamic which requires technical proficiency and kaleidoscope thinking was in silos skills and mindsets are replaced with cross overthinking. And hybrid jobs will be the need of the hour were in people with hybrid jobs are less likely to become professionally obsolete. Employees laced with a diversified skill set will get many more opportunities for the upper ladder than one specific skill. The future workforce needs to be multi-skilled and have expertise in big data, analytics, and cloud computing.

#### LITERATURE REVIEW

Human Resource is the foundation of any business organization. Technological advancement has transformed how Human Resource (HR) professionals use to functions and emphasize greater competencies to sustain in the competitive environment. With smart technology, HR Professionals need to be smart HR (Brijesh ET AL, 2018) (HRM activities are bifurcated into three parts (Transformational/Transactional/ Traditional) The first HR department was created in the earliest 1901 in response to a strike at the national cash register co. in Dayton, Ohio which was then known as personnel management, after world war 2 the idea of the human resource department was embraced to handle the employees of the organization. Post half of the 20th century, a slew of work-related laws-including the Equal Pay Act (1963), the Civil Rights Act (1964), and the Family and Medical Leave Act (1993)-made the presence of HR specialists too evident.(Milligan et al,2018).Growing Technology has changed the core competencies in HR.(Suen et al, 2018) giving rise to e -HR domain which is one of the most important functions of HR. it indicates how technology provides ease in carrying various HR functions such as recruitment, people management, skill development, training, career planning, and performance management. Were in machines can do the mundane work HR can work on more critical aspects such as counseling an employee retaining program. Studies convey that with the advent of E-HRM HR professionals can focus on strategic development value creation and knowledge management and intellectual development. By embracing digital technology, HR professionals are trying to create a shared culture and career development aspects.

The study focuses on building a principle-based approach for developing HR capability The HR professional will be facing a series of challenges in regard to diversified workforce rising skill shortages, reconstructing talent infrastructure and talent practices and creating a new way of working that creates a win-win situation for everyone, the technology acceptance model (TAM) is a model based on user acceptance and usage of information systems (Huang et al,2013). This model focuses on two major aspects perceived usefulness and perceived ease of use. Perceived usefulness is the belief that using a system will enhance job performance and perceived ease of use emphasizes that it will require minimum effort (Huang et al,2013). With digitalization, human resources can become knowledge sharer by sharing knowledge, gaining wisdom and creating a platform with advent technology so everyone can share knowledge. Individuals are able to create an online community and share and communicate the latest details and resources (Shirky, 2012). HR professional plays a strategic role such as change agent, champion, business partner, Making the mission and vision statement and Promoting a culture of the learning

organization and knowledge management (Mathew et al, 2010). It is a fundamental requirement for HR professional to get trained in technical aspect. Study suggest that it is important for HR professionals to develop certain proficiencies (Haribabu, 2015) develop certain Study emphasizes that it is empirical for HR professional to leverage their technical skills and need to have an understanding about the future HR technology (SHRM). It states that with emerging technology there is a career path for HR professions such as "HR Technologist" these employees are extremely well versed with the technology used in HR. "For technology to success, it's important that the HR professional keep the role of technology in consideration (Moe). Automation, the internet of things and artificial intelligence is creating concern for many HR.

Advancement in technology can be considered as a new opportunity since new jobs will be created which never existed before. The future generation is more inclined towards the gig economy as it provides them with working flexibility and to work on their specialized area of interest. Since millennial / Generation Z are the largest workforce and the generation that will represent nearly 75% of the workforce by 2030 freelancing and contract base jobs are increasing at an alarming rate. In today era Generation Z are joining the workplace at a very young age and nearly 75% of the population will be youngster by 2030.it's important for HR professional to study them and know how they can modify themselves to engage the future workforce. Study indicates that Generation Z has proficiency in digital technologies Organizations need to consider the micro trends in its industry while planning for their future workforce in the dynamic tech-savvy environment (Stoepfgeshoff, 2018). Study state that there is an effect of emotional intelligence on the influence of blue ocean leadership style on the strategic decision making of leaders that help to release an organization's unrealized talent and energy. (Daud et al, 2018). According to the CXO officer of burning glass technologies Matt Sigelman, the future job will require a breadth of skills and just not one specific skill which is coined as "Hybrid Skills".

According to the journal report, the future HR professional & employees need to develop their technical skills to supplement their social skills. According to the journal report, the firms are expecting the growth of hybrid jobs by 21%. HR professionals need to adopt inclusive leadership style and emotional intelligence has become one of the important aspects for analyzing effective leaders for strategic decision making and has become an instrument for developing viable leadership skills in the organization. (Ealias et al, 2012). The future jobs will require both technical and creative thinking (Dow Jones Institutional News, New York, 2019). According to studies similar to humans, robots do not consist of emotional quotient and humans will act as important partners working with advanced algorithms. (The Business Times, Singapore, 2018).

The future workforce emphasizes on the requirement of a new skill set such as empathy, innovation to steer the company (Brady et al, 2018) Study states that to sustain in these hybrid worlds were technology and people cognitively collaborate, the HR Professional and employees need to upskill, reskill and retrain themselves. The future will hold a high demand for HR Technologist, IT Communication Specialists, Creative Technologists, IoT Marketing Technology Strategists, User Experience Designers, Digital Storytellers. The study states people management, emotional intelligence judgment, and decision making will be the basic skill requirement of the future. Wearable internet, big data analysis, sensor-based life, smart city implementations will lead to Social Transformation. According to the reports, 77% of the CEO states soft skills, like emotional intelligence, as among the most valuable skill set.

#### MANAGERIAL APPLICATION

The advent of industry 4.0 lead too many challenges faces by the HR managers were in they need to focus on various aspects in terms of analysis and strategizing, planning and implementation, cooperation between man and machine, understanding the business models, human resources, Initiating change management and leadership role (Schneider, 2018). Increment of talent in the digital world is giving much more emphasis on talent management tools enforcing the manager to focus much more on predicting and understanding behavior (Winsborough et al,2016)

#### **OBJECTIVES**

- 1. To understand how new age revolution will affect the future HR Professionals in the organization and to explore the new challenging role in the era of Industry 4.0
- 2. To study the relationship between Artificial Intelligence & Emotional Quotient.
- 3. To understand the various skill requirement for the future HR Professional and the employees.

#### **METHODOLOGY**

To analyse the future trend in the HR profession with context to industry 4.0 and to understand the challenges, opportunities and barriers set ahead, exploratory type of research is used. An extensive literature was reviewed. The information was collected from secondary sources like research papers, books articles, etc. We also conducted one to one interview and gathered insights from experts from the domain of HR.

#### **GENERATION Z**

Generation Z or Gen Z are referred to as digitally tech-savvy people are born from 1992 onwards. Generation Z is comfortable with technologies and they are also known as the "digital natives". They are the first generation were digital technologies plays an important role in providing them with opportunities.

#### **Physical Aspects**

- The study states that they are born in the mid-1990s between (14-23) their parents are the millennials. and they are tech-savvy and highly multi-taskers and want Instant gratification
- Generation z is the "app generation" and YouTube is there top preferred learning method

#### **Social Aspects**

- Generation z is one of the most diverse generations and gig economy came into consideration were enterprises hired temporary workers and freelancer instead of permanent workers
- Advent digitalization led to the increment of the future workforce towards the gig economy. companies are opting for a gig economy as it benefits the organization from several perspectives such as labor welfare benefits like pensions, gratuity, and many other monetary rewards can be avoided. (Morgan & Deligan, 2018). And the public is adopting this trend because they want flexibility in working along with freedom which is offered by gig economy working patterns.

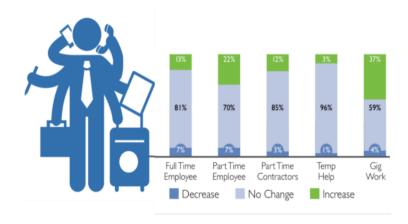


Fig 1.1 (Score 2017)

### Factors that influence hiring a gig economy

Parameters	Percentage
Specialization in particular area	50.80%
To run the Business	47%
Availability of workforce	41.00%
Cash reserve for payroll of all employees	35.10%
Cost of employee healthcare	30.70%
Retirement benefits	20.10%
No requirement of workplace	10.40%

Fig 1.2 (Score, 2017)

## **Psychological Aspects**

- **Do it yourself**: Generation z does it yourself type. They are highly independent and want to do everything on their own whether it is online shopping or choosing a career or finding a job for themselves.
- **Data Driven:** They are highly tech-savvy and data-driven and spend most of their day surfing on the various social media platform.

• **Optimistic:** Generation z can be called as a sober generation. They are very realistic and practical and highly optimistic and ambitious in nature at the same time they are pragmatic and aware of the forces that are beyond their control.

#### **Financial Aspects**

Generation z is not like the millennial who believes in a 9-5 job. They want to make fast money thus digital technology has leverage and given them the opportunity for the same. Such as YouTube. by being a YouTuber and Instagram by marketing the product. By using an e-commerce website for online retailing. Since they are tech-savvy and ahead as compare with any other generation when it comes to the transaction such as mobile payment or bank transactions. They carry their bank branches in their pockets.

#### **Future of Gig Economy**

In India, the gig economy is a positive growing concept where many organizations and start-ups are transforming from a traditional way of working towards a more developed way. It has completely changed the concept of working. Technology has helped in consolidating urban and rural workforce and enabling centralized communication, real-time scheduling, tracking, dashboard and video conferencing. 64% of its population will be in the 20-35 age groups by 2021. So, the culture of the gig economy will be growing at an alarming rate.

#### **Expectations of Millennial / Generation Z**

- Transparency
- Self-reliance
- Personal freedom
- Flexibility
- They expect to be heard and responded

# THE RELATIONSHIP BETWEEN ARTIFICIAL INTELLIGENCE & EMOTIONAL QUOTIENT

Artificial emotional intelligence is a technological brass ring for a growing number of companies and researchers that is helping business and organization to detect the human emotional level, for example, Affectiva an emotional measurement technology developed a wearable biosensor that measures electrodermal activity, "Q Sensor," that monitors changes in the user's emotional state by his/her skin and a cloud API to detect a range of emotion in human speech. These tools include apps that detect when students will be stressed out, vocal analysis software that helps diagnose mania and schizophrenia and programs that predict suicide risk based on social media posts. AI and robots will replace all mundane and repetitive tasks but what they can't replace are skills such as persuasion, empathy, and understanding that will become highly valued over all other skills in the future. EQ is one of the most critical "soft skills" that all the employees and HR professionals need to possess.

The difficulty arises while using the software which evokes a negative emotional response, affecting employee productivity and performance. Digitalization platforms help in building up a layer of "emotional intelligence" to a software platform that led to positive emotional user experience by the help and preventing factors that led to user frustration. Emotional inputs are creating a shift from data-driven IQ-heavy interactions to deep EQ-guided experiences, for example, the system uses emotional analysis to adjust their response and decision-making process.

#### FRAMEWORK FOR FUTURE HR PROFESSIONALS

The advent of industry 4.0 is giving much more emphasis on the internet of the thing, artificial intelligence, cloud computing, advanced human and machine interfaces, smart sensors, augmented reality, big data analytics, customer profiling. HR has entered a new face of evolution were organizations need to restructure themselves as especially the HR function by focusing on workforce diversity and inclusion of business strategies. Industry 4.0 is changing the way organizations function It is changing the way HR professional functions by bringing the changes in their roles. In the current scenario, the HR professional is playing the role of a business partner and strategist. They need to understand the various business functions in terms of the internal and competitive external environment. They also enacted the role of change agent. They play the role of a champion by facilitating various employee mobility opportunities for the workforce in the organization. Technology is reshaping jobs and affecting every aspect of the business, from marketing and customer acquisition and service to risk selection and distribution Emotional intelligence encompasses a wide range of critical interpersonal skills. Emotions influence our performance. As it is the communication between our emotional and rational brain. The more developed our emotional intelligence skills, the more effective we are at controlling them and using them to our advantage. It's a flexible set of skills that can be acquired and improved with practice over a lifetime. Professionals and employees will need to focus on skills and capabilities that artificial intelligence has trouble replicating-understanding, motivating, and interacting with human beings. Automation and robotics will lead to more hybrid jobs in an organization that will require candidates to possess cross-category skills.

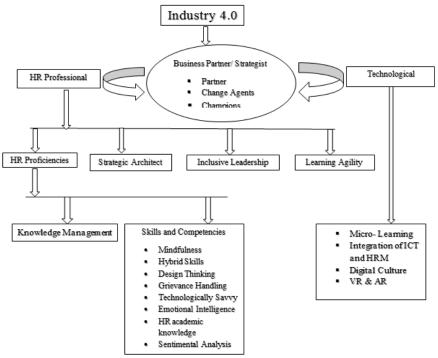


Fig 1.3 Framework for Future Hr Professionals

Figure 1.3 Framework for future HR Professionals states that HR professional and employees need to have certain skills and expertise such as-

#### 1. HR Proficiencies

HR needs to possess an understanding and knowledge of various HR activities such as the working pattern of the labor market as the future workforce is the millennial. The role of the external environment in terms of human resource policies. An understanding of the labor market law and the application of the same in the organization. They need to understand the strategic planning, marketing, finance, and production and provide HR activities in financial terms such as return on investment.

#### 1.1 Knowledge Based Management

Advancement in digital technology is catering towards a more knowledge-based workforce who is more driven towards innovation and creation. KM and AI at its core are about knowledge. They are two sides of the same coin. The connection of KM and AI has led the way for cognitive computing Earlier knowledge sharing was done in organization through yellow pages followed by collaboration with technologies, for example, google docs IBM lotus notes, wiki pages, TWiki, were semantic search help in finding new old stuff, for example, Hakia's technology, cognition technology (power search engine), powerset technology (question answering engine) true knowledge, Wolfram Alpha (computational Knowledge Engine).

#### 1.2 Skills and Competencies

Due to the constantly changing business environment and digitalization have placed a demand on HR Professional to develop certain competencies and skills.

- **a. Hybrid Skills:** The future jobs are going to be multi-disciplinary and complex in nature which will lead to hybrid job blending left-brain (logical, organized) and right brain (creative, artistic). The future employees will need to merge traditional soft skills for example communication and hard-technical skills that use to belong to a specific tech-savvy group. For example, a marketing manager needs to have analytical skills and need to know SQL or SAP.
- b. HR Analytics: AI assesses the HR professional with various data analytics such as Descriptive analytics that help in revealing the key metrics and measures within the business. Forex: IBM's Watson natural language interface. Diagnostic analytics aid an analyst to dig deeper into an issue at hand so that they can arrive at the source of a problem Ex: Crunchr this software helps to realize where there are gaps incompetency. This serves as a foundation for HR action plans to source the right candidates and develop the employee's Prescriptive analytics explains the step-by-step process in a situation. For instance, it comes into play when your Uber driver gets the easier route from Gmaps. The appropriate route was selected by analyzing the distance of every available route from the pick-up route to the destination and the available traffic constraints on each road. Example: BOARD software that provides All-in-One Platform and Predictive analytics help businesses to forecast trends based on the current events. Example: BambooHR software is designed for future workforce planning and organizational network analysis tools.
- **c. Mindfulness:** With increasing digitalization employee need to do multitasking, which requires a high level of mindfulness, or it might affect the performance of the employee. It can be achieved by focusing on 5 major aspects such as Identify choice points, Awareness breaks, reducing multitasking, Conquer your inbox, Daily mindfulness training.
- **d. Design Thinking:** It refers to a creative approach to problem-solving. It focuses on developing a human-centric mindset that focuses on designing programs or processes to create meaningful experiences. It will be transforming the HR role from a "process developer" into an "experience architect." The design starts with Empathizing with customers/employees understanding their needs and frustrations, defining the problem and then brainstorming to identify the best ideas and solutions, and building prototypes to test what works and what doesn't.
- **e. Grievance Handling:** The technological advancement led to an increase amalgamation of man and machine giving rise to various disputes that need to be resolved. The HR professional needs to develop those skills and competencies set of grievance handling.
- **f. Technologically Savvy:** The future HR professionals need to be tech savvy they need to use technologies to improve the process, engage talent across the organization and drive new and value generating the business model.

- **g.** Emotional Quotient: As emotions are highly personal, and people have concerns about their privacy invasion and manipulation the hurdle arises in not finding the right emotional AI, but having humans with a high emotional Intelligence level. It's the need of the hour that HR Professional and employees develop a high level of Emotional Quotient
- **h. Human Resources Academic Education:** The education system should be such that it should not include only theoretical concepts but practical hands-on knowledge about various HR activities.
- i. Sentimental Analysis: It is of the most important tool HR professionals should use such as employee sentiment software as it may be able to flag a problem by knowing the emotional tone of the employee so that necessary actions can be taken to resolve the situation and it helps the organization to analyze a particular risk before the employee leaves the organization.

### 2. Strategic Architect

HR professionals need to act as a strategist and initiate various HR strategies in alignment with organizational goals and objectives. They need to act as a value adding partner by fulfilling various businesses need such as minimizing cost and maximizing profit. They need to design various HR strategies for future organizational goals. They need to study the monetary impact of HR activities and various business issues.

#### 3. Inclusive Leadership

HR professionals should have the knowledge of leadership and should initiate changes in organizations for better productivity of the Workforce. The six-signature trait of an inclusive leader in terms of diversity in customer, market, ideas, and talent are:

- Curiosity
- Cultural Intelligence
- Courage
- Cognizance of Bias
- Collaborative
- Commitment
- 4. Learning Agility

It plays an important role in the HR profession was in they constantly need to adapt to new technology and their implementation in the organization. Learning agility locate and use new and existing knowledge and fosters a spirit of curiosity and inquiry.

#### TECHNOLOGICAL ASPECTS

- 1. Micro Learning: It provides more than a bit size of training asset it focused and offers the right amount of information which is required to help a learner achieve a specific and actionable objective. Businesses are embracing micro learning as it is cheaper to build, quicker to deploy, and can be updated fairly easily.it provides ease in various aspects such as Personalization and autonomy, just in time learning. It provides different modality which provides a rich experience for the employees.
- 2. Virtual Reality & Augmented Reality: VR is the usage of technology to create a simulated environment within a 360-degree video experience. VR plays an important role during employee recruitment and onboarding process, for example, The General Mills recruiting team used VR and Oculus Rift when reaching to students both in and outside the classroom. Using GoPros, General Mills's IT team created a virtual tour of their headquarters in Minnesota to provide a 360-degree view of the space for students. So just having a VR technology at their booth at career fairs brought people in. Another example is Gamification.
- 3. Digital Culture: Digital culture needs to be inculcated in the organization since the major concern is not the lack of the right technologies but the lack of digital vision. Companies need to make a robust digital culture they need to train and retain employees in the tech-savvy environment. They need to focus on culture and people to drive transformation. Reskilling and upgrading of employees need to be done in order to develop smooth functioning in the organization.
- **4. Integration of ICT and HRM:** Integration of information and communication technologies is the must in human resource management as it provides the organization with various benefits. Such as enabling online staff recruitment process, easy accessing of employee information when needed, enables HR department to collect and assess employees work information, enables monitoring of employees to work attendance and enable the employee to apply for leave attendance

#### **FUTURE SCOPE**

- 1. **Knowledge Management:** Advancement in digital technology is catering towards more knowledge-based workforce who is more driven towards innovation and creation. KM and AI at its core is about knowledge. They are two sides of the same coin. So, more studies can be done pertinent to knowledge management in HR domain.
- 2. Cognitive Skills: Cognitive skills are the mental capabilities, such as perception and reasoning, that are critical to process information and gain knowledge. Intuition another cognitive skill which is important for HR. It is a cognitive skill that determines the potential and quality of interpersonal relationships. This skill helps HR to recognize attributes, traits and characteristics in applicants, candidates and employees that create a

philosophical fit within the organization. So a more futuristic study on the importance of cognitive skills for HR professionals can be done.

#### **CONCLUSION**

Industry 4.0 is creating new work since the replacement of manual sewing machine with advent machine created more work and leverage productivity rather than taking away jobs. The HR professional job won't be taken away rather their roles will be changed inclining more towards strategic management/ Change agent/mediator/counselor in the organization. The educational institutions and organizations should work together in providing technical training in HRM and the HR professional should keep themselves upgraded with the latest technologies.HR professionals need to upgrade their expertise in order to make a fair contribution and to create shared value for employee's organization and society as a whole by focusing on transformational innovation and specialized knowledge. They need to develop HR proficiencies and act as strategist architects by providing a guiding framing by focusing on inclusive leadership and by adopting the latest technology. They should have a broad knowledge base management while dealing with the generation z workforce who are highly technology driven for encouraging creativity and strategic changes and leverage themselves with certain skills and competencies such as Hybrid skills, design thinking (creative approach to problem solving) grievance handling in terms of man and machine, mindfulness, emotional intelligence, and use tools such as sentimental analysis. And educational institutions should think creatively outside existing program boundaries. Emphasizes should be given on micro learning as it provides different modality followed by virtual and augmented reality as it helps in various HR functions. It is the need of the hour that organizations focus on a high level of digital culture to sustain in the dynamic and competitive environment.

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# An Empirical Study to Explore the Brand Positioning Strategies in Personal Care Products

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#### **ABSTRACT**

Brand positioning refers to how a brand is setting itself unique and distinct as compared to its competitors. Brand positioning components are logos, packaging, brand perception, celebrity endorsement, brand association and brand essence. In order to position itself successfully brands should be focused, different and relevant. The objective of the current study is to examine the brand positioning strategies of personal care product category with special reference to Lux.

The study also aims to develop and standardize a scale to evaluate brand positioning strategies. It explores the factors and preferences that induces consumer to buy the products, considering the brand positioning in today's digitized world. The study was exploratory in nature and the sample size includes 150 respondents. Validity, reliability, item to total correlation and factor analysis resulted in to four factors viz Current Positioning, Media Planning, Value proposition and Quality proposition.

**Keywords:** Brand positioning, personal care products, customer preference, value proposition, quality.

#### INTRODUCTION

With the growth in digitization, globalization and India's remarkable achievements in international beauty pageants, personal care industry is flourishing in India. New product introduction is now a trend and all credit goes to the rising number of players from both domestic as well as international markets. With high potential backed by high growth rate, India has always been the most preferred destination of MNCs for doing business. Few major other factors contributing the growth of personal care industry in India includes growth in organized retail sector, increase working women percentage, changing spending and lifestyle patterns, higher disposable income and preferences for branded luxurious and lifestyle oriented products.

The products under personal care industry include cosmetics and personal hygiene products. Some of the products that are included in personal care are wet wipes, toothpaste, toilet paper, talcum powder, moisturizer, shaving cream, razors, perfumes, pomade, nail files, makeup, lotion, lipstick, lip gloss, hair clippers, facial tissue, eye liner, deodorant, cotton pads, cotton swabs, colognes, and cleansing pods. Organic and herbal personal care products are the new and emerging category in personal care products. Trend is now moving from functional products to

more specialized and advanced products. The domestic market for personal care products is projected to grow at a CAGR of around 22% during the period 2017-2020(ASSOCHAM, 2017)Currently, India accounts for a share of just over 1% of total global personal care, cosmetics and cosmeceutical market. This share is projected to grow extensively over the next 5 years.

Brand positioning is a major decision in marketing that seeks to build an image of a product in consumer's mind. It is a function of the brand's promise and comparison with other choices with regard to quality, innovation, perceived leadership, value, prestige, trust, safety, reliability, performance, convenience, concern for customers, social responsibility, and technological superiority and so on. According to Ries and Trout (1969), positioning is a concept that creates the perception of a product, brand or identity. Positioning refers to a product's image in consumers mind as compared to its competitors. Brand positioning is the collation of all activities that position the brand in the mind of the customer vis-as vis its competition. Marketing efforts coupled with product attributes will make the product a leader in the market. According to Ambler (1992)brand from a consumer-oriented approach is the promise of the bundles of attributes that a consumer buys and provides satisfaction. The attributes that make up a brand may be real or illusory, rational or emotional, tangible or invisible. Sengupta (1998) pointed out that positioning strategies require that the brands to define brand's identity, lineage, or family; functional capabilities of the brand; the consumer segment that the brand serves best and powerful reasons to choose this brand rather than an alternative brand.

Kotler, Adam, Brown and Armstrong (2001) defined brand as a name, term, sign, symbol or design, or a combination of these, intended to identify the goods or a combination of these, intended to identify the goods or services of one seller or group of sellers and to differentiate them from those of competitors. The legal term for brand is trademark(AMA 2009). Kotler (2002) aptly defined "positioning is the act of designing the company's offering and image to occupy a meaningful and distinct position in the mind of the target customers". Ries and Trout (1997) suggested that, to succeed in the competitive market, a brand should position the brand in the target consumer's mind in a way that their perception of the brand is distinctive and offers more customer value than its competitors do. Sridhar (2006) suggested that a strong brand position refers to a unique, credible, sustainable and valued place with the customers. A brand name creates remembrance and a sense of recall for the mass public and such kind of brands are able to compete in the market. Few authors indicated that the quality of a product, prices charged, methods of distribution, image, communication tactics, and other factors create positioning and are, in turn affected by the brand's position. Reis and Trout (1969) define positioning as "an organized system for finding a window in the mind. It is based on the concept that communication can only take place at the right time and under the right circumstances."

#### RATIONALE AND OBJECTIVES

Brand positioning of personal care products is still an unexplored area specifically in Indian context. Existing literature on brand positioning lacks understanding about the specific

characteristics and strategies of building brands in FMCG, specifically in personal care sector. The present study attempts to fill this gap.

The objective of the study is to develop and standardize a scale to evaluate brand positioning strategies of a brand. It also aims to understand the factors and preferences that induce consumers to buy the products, considering the brand positioning in the minds of the consumers.

#### METHODOLOGY AND DESIGN

**The Study:** The study is exploratory in nature. Online survey method has been used as a tool for data Collection. It aims to examine the brand positioning strategies of personal care product category with special reference to Lux, as perceived by the customers. It also aims to develop and standardize a scale to measure Brand Positioning.

**The Sample:** The non-probability purposive technique of sampling was used to collect the data. Demographics of the respondents were also recorded. The sampling element for the study was individual customer of soaps category. The sample included 150 respondents who have seen to commercial, print ads, Instagram and Facebook ads, story ads and also who use Lux Products. Both male and female respondents from Mumbai city were included.

**Data Collection:** Data was collected through self-designed questionnaire, comprised of total 14 items. All these 14 items were presented on a 5 point Likert type of scale wherein 5 indicated strongly agree and 1 indicated strongly disagree. It was presented to a sample of 150 respondents. The collected data was also screened for the response error.

Data Analysis: To ensure the internal consistency of all the items of Brand Positioning, item to total correlation was carried out. Pearson correlation was applied between the item scores and the total scores, for all the items of brand positioning . The questionnaire was then checked for the Validity and Reliability. Cronbach's Alpha reliability coefficient measure was calculated. After this Factor Analysis using principal component extraction method with varimax rotation was carried out so as to identify the factors of Brand Positioning. Bartlett's test for sphericity and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was also applied along with factor analysis.

#### **Results and Discussion**

*Item to Total Correlation*: The consistency of all the statements in the questionnaire of Brand positioning was checked through item to total co-relation. For this Pearson Correlation was applied. In this, co-relation of every item with total was measured and the computed value was compared with the standard value of r. r150=.1590 Since all the measures were having item to total correlation higher than the standard value so none of the item was declared as inconsistent or dropped from the questionnaire. This means that all the items in the scale contribute significantly to the Brand Positioning variable.

**Table: Showing Pearson Correlation values** 

No.	Statements	Value	Consistency	Accepted / Dropped
1	Quality influences my purchase.	0.5148	Consistent	Accepted
2	I consider Fragrances while purchasing	0.588	Consistent	Accepted
3	Varied number of product assortments.	0.5785	Consistent	Accepted
4	Value for money.	0.6133	Consistent	Accepted
5	Product packaging influences my purchase.	0.4654	Consistent	Accepted
6	I do consider promotional offers	0.391	Consistent	Accepted
7	The product deliverables and offerings are at par	0.6021	Consistent	Accepted
8	This product actually enhances my beauty	0.3933	Consistent	Accepted
9	Soft and healthy skin.	0.5153	Consistent	Accepted
10	The advertisements seizes my attention	0.6884	Consistent	Accepted
11	Advertisement creative and unique.	0.588	Consistent	Accepted
12	Well established social media presence	0.4746	Consistent	Accepted
13	Celebrity endorsements are impactful	0.5394	Consistent	Accepted
14	Distinct image as compared to its competitors.	0.5553	Consistent	Accepted

**Validity Test:** After the thorough review of literature and experts guidance, the face validity of the paper was found good as the instrument contains a representative sample of the universe of the subject matter. It adequately covers all the topics of the relevant dimensions. A high validity was ensured by a careful definition of the topic and right selection of items to be scaled.

**Reliability Test:** The reliability of Brand Positioning was computed using SPSS20 software. Cronbach's Alpha reliability Coefficient was computed to calculate the reliability of all items in the questionnaire. It can be seen from the above statistics that the reliability measure for Brand Positioning variables is higher than the standard value of 0.7, so it can be said that all the items in the questionnaire are highly reliable.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.798	.802	14

#### **Factor analysis:**

The Principal Component Factor Analysis was applied with Varimax Rotation so as to identify the underlying factors of Brand Positioning variable. Before proceeding for factor analysis, the raw data was checked for sampling adequacy and sphericity. The positive result shows application of factor analysis is appropriate. For Brand Positioning the KMO measure was 0.790 which is more than 0.5 indicating that the sample is adequate for the application of factor analysis. The Bartlett's Test of Sphericity was tested through Chi-Square test, significant at 0% level of significance. Its associated probability is .000 and is less than 0.05 indicating that the data has low or no sphericity. Bartlett's Test of Sphericity is significant this means that the correlation matrix is not an identity matrix. Thus the data collected for the Brand Positioning is suitable for undertaking factor analysis.

#### **KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measu	.790	
Bartlett's Test of	576.053	
Sphericity	df	91
	Sig.	.000

The Factor Analysis with Principal Component Method and Varimax Rotation was applied. The raw scores of the 14 items of the Brand Positioning comprised of four factors namely Current Positioning, Media Planning, Value proposition and Quality proposition.

		_
Rotated	Component	Matrixa

		Comp	onent	
	1	2	3	4
Fragrances	.787			
Assortments	.716			
Packaging	.582			
Advertisement_Attention	.564	.360		
Value_for_Money	.545		.345	
Social_media_presence		.788		
TV_Advertisement		.762		
Distinct_Image		.641		
Celebrity_Endorsements	.401	.549		
Product_deliverables_off erings		.448		.335
Beauty			.850	
Healthy_soft_skin			.809	
Promotional_Offers				.878
Quality	.455			.520

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

Factor 1: Current Positioning: The factor comprises of five variables. The variables being Fragrances (.787), Assortments(.716), Product Packaging(.582), Advertisement Attention (.564), Value for Money(.545)

Factor 2: Media Planning: The factor comprises of Five variables. The variables being Social Media Presence(.788), TV Advertisement(.762), Distinct Image(.641), Celebrity Endorsements(.549), Product Deliverables at par with Product Offerings(.448).

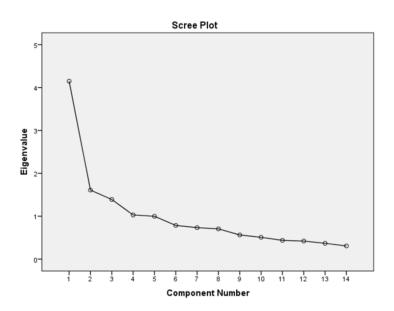
Factor 3: Value proposition: The Factor comprises of two variables. The variables being Beauty(.850) and Healthy soft skin(.809)

Factor 4: Quality proposition: The factor comprises of two variables. The variables being Promotional offers(.878) and Quality(.520)

	Eigen Values				Factor
Factor Name	Total	%Var iance	%Cum ulative	Variable Covered	Loading (Rotated Component Matrix)
Current positioni ng	4.149	29.632	29.632	-Fragrances -Assortments -Product -Packaging -Advertisement -Attention -Value for Money	.787 .716 .582 .564
Media Plannin g	1.609	11.493	41.125	-Social Media Presence -Ty Advertisement -Distinct Image -Celebrity Endorsements -Product Deliverables at par with Product Offerings	.788 .762 .641 .549 .448
Value proposit ion	1.390	9.928	51.053	-Beauty -Healthy Soft skin	.850 .809
Quality Proposit ion	1.029	7.348	58.401	-Promotional Offers -Quality	.878 .520

a. Rotation converged in 6 iterations.

**Scree plot:** The scree plot graphs the Eigen value against the factor number or component number. It tells the number of factors that can be retained for analysis. One rule is to consider only those with Eigen values over 1.



Another rule is to plot all the Eigen values in their decreasing order. The plot looks like the side of a mountain. Scree graph plots all the Eigen values in the decreasing order of their magnitude. It helps to visualize the relative importance of the factors. A sharp drop in the plot signals that subsequent factors are ignorable. It can be seen from the following graph that the slop is falling till the Fourth factor. From the Fourth factor on, the line is almost flat, meaning the each successive factor is accounting for smaller and smaller amount of the total variance.

Fuchs and Diamantopoulos (2010) studied the effectiveness of brand-positioning strategies from a consumer perspective and the criterion was analyzing brand favorability, differentiation, and credibility considering specific brand, product category and socio-demographic influences. Result reflects that there is no specific strategy that outperforms all the others on all dimensions. That means all strategies vary under all situations. Also, benefit-based positioning and user positioning generally outperform feature-based positioning strategies. Mann and Mandeep (2013) conducted content analysis of the branding strategies of FMCG, services and durables and found that strategies differ across all the three sectors. Yet corporate branding was found to be common across all sectors. For durable products and services, single corporate brand strategy was more common. For FMCG product organizations and services organizations, individual branding endorsed by the corporate branding was more popular. It was also concluded that organizations are now focusing more on leveraging brand equity.

Jalkala and Keränen (2014) explored Brand positioning strategies of industrial firms which were into providing customer solutions and stated that while competitor and customer analysis are an integral part of every brand positioning process they are not enough though. Companies must understand customers buying process, usage and their feedback on product's offerings and attributes, in order to develop effective brand positioning strategies. Emphasis should be on integrating product and service offerings to position a brand effectively specially in B2B context. Also him the firms should be total solutions provider rather than just a solution provider. The

study concluded that customer value diagnostic, global solution integrator, high quality subsystems provider and long-term service partner are the majorly used positioning strategies in this sector. They also concluded that delivering customer value should be the prime objective followed by acquiring or developing capability configurations should be focused which differentiate the brand positioning of the firm from that of competitors. Singh et al (2014) explored the customer's perception towards brand positioning strategies with special reference to cobranding. They conducted a study to analyze the impact of perceptions of parent brands' positioning on consumers' perceptions of cobrand. The results indicated brand positioning as a strong reflection of consumer evaluation of cobrands. Also positioning perceptions of partner brands are positively related to cobrand positioning perceptions. In addition, pre-alliance positioning significantly relate to post-alliance positioning, confirming cobranding as a viable strategy for partner brands.

Web searches reveal a lot about customer's preferences for a product or a brand. Many researches have been done by google trend analysis to establish relationships among product brands as well as those between product brands and product attributes. Jun and Park (2017) conducted a study to explore customer's perception regarding product brand by analyzing search traffic by the customers. According to them the search behavior traffic can reveal a lot about the brand positioning and brand-attribute associations of consumers. Shams (2015) explored the understanding of stakeholder relationships, interactions, their subsequent relational dimensions and its impact on stakeholders' perceptions towards brand positioning. The finding reveals eleven relationship marketing dimensions.

Doyle(1975) stated that multi-dimensional scaling offers a useful approach to the brand-positioning problem. In his study he found that most brands compete in well-established markets. The study also emphasizes on the importance of understanding existing markets and consumers preferences in advance as the customer perception is heterogeneous. Sagar et al (2011) stated that ethics can be used as a product differentiator and can create a strategic advantage. They introduced the ethical positioning index an innovative ranking scale based on the ethical issues in brand positioning. Five basic elements of brand positioning, brand identity, brand image, brand personality, brand awareness and brand communication are blended with the three basic elements of ethics viz beliefs, values, symbols and customs to create better brand positioning.

In the context of global brand positioning, Gammoh et al (2011) examined the impact of global consumer culture positioning to that of local consumer culture positioning strategies on consumer evaluations of a fictitious brand. The focus was to be identified in global marketplace. It was found that such strategies were effective in improving respondent's attitudinal behavior towards the fictitious brand. Lee and Liao (2009) conducted a study to understand consumer preferences and perceptions of brand positioning strategies of Chinese tea beverages. They stated that organizations use strategies such as quenching thirst, attractive advertising, or reliable quality to develop their positions. Also brand positioning aimed at consumers remembering particular information conveyed by the brand. This was the core of developing brand positioning strategies.

#### CONCLUSION AND RECOMMENDATIONS

The study has resulted into the development of a administrable scale for the measurement of effectiveness of brand positioning strategies. The scale was standardized and then used for the study. The standardization procedure resulted into 14 items for brand positioning. The study has resulted in the constituting factors for brand positioning. The raw scores of the 14 items of brand positioning revealed four factors viz. Current Positioning, Media Planning, Value proposition and Quality proposition.

To gain a competitive advantage, individual company wise study application should be done. Also one product category i.e. personal care products been considered. The same study can be conducted for a many other product categories as well. The study was confined to Mumbai city only. A bigger sample across various cities would generate better results. Time was another constraint for the research. Further financial, legal, and social impacts can also be explored. There are various demographic variables and psychographic variables which may affect the perception towards brand positioning. This can be explored further to have precise results. Various combinations of these variables may generate newer results. The study can be extended by linking brand positioning with market segmentation. This will generate effective guidelines for the design and coordination of a brand positioning strategy.

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## A Model to Mitigate Stress Levels in the Digital Age

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#### **ABSTRACT**

The mundane tasks done daily accumulate into larger than life problems forming the 'daily hassles' part of life and seem to offer no worry until they assume large amounts affecting changes in the digital transformation age. This brings in the concept of 'key human resources competencies of stress aversion techniques to handle digital transformation' which happens when one gains competence through overcoming the little daily hassles of life and is better-equipped to control the sea of qualms enthralling one's mind.

Stress and well-being are two sides of the same coin. If the dominant side is everyday stress then it continues to build till it puts a victim to lie in a state of distress or in worse cases, within a medical shelter, attended to by caregivers and one's acquaintances. This is the condition of the common man in the digital eon. A peek into the life of a caregiver like a hospital administrator is bound to follow suit. Based on qualitative research, we are assuming that there exists such everyday stress amongst hospital administrators. So we reduce and eliminate the stress levels through quantitative research, by constructing an appropriate model.

In this research paper a model has been constructed to mitigate assumed stress levels among administrators of hospitals in Greater Mumbai in the digital age.

The work explains stress levels depending on parameters, may be computed in order to hire fresh talent at optimum levels for the digital era.

**Keywords:** Indian service sector, hospital management, hospital administrator, stressors, stress mitigation model

#### INTRODUCTION

The global healthcare market spending is high with occasional dips and rises in its nature. The healthcare industry in the Indian service sector is currently booming. The hospital industry is a prominent feature with lots of scope to emerge as a growing economy for India. The ratio of patients to hospital beds is a major area of concern to most Indian hospitals. Due to the opening of the economy, nowadays a large number of hospitals are entering the private domain. Due to the emergence of private hospitals the government and municipal hospitals are gearing up to deal with the loss in market share. In Greater Mumbai at the advent of rigorous urbanization a lot of

changes in terms of travel by upcoming metros and the spurs of digital India have made the healthcare market here taste a slice of western modernization.

Amidst all this digital structural anarchy, the emergence of the role of an administrator of a hospital is of prime importance. The hospital administrator acts as a mediator between the members having ownership or founding members and the day-to-day running-around required by its doctors, nursing and hospital staff. The concept of a hospital administrator emerged in the last few decades in India (Government of India, 2018).

Earlier the hospital management trustees used to manage hospital related issues along with trusted hospital staff including doctors or nurses. New hospital soft wares to ensure digital transformation are threatening the older aged employees. There are various other parameters on which stress levels may vary in the context of the job of a hospital administrator. Apart from the daily hassles which comprise the stress level cases, we have tried to compare them depending upon the type of hospital, monthly income, gender, age and marital status. There are numerous daily hassles in the form of dealings with friends or family, watching entertainment programmes, work related pressures, finances, health issues, personality problems, climatic conditions, political fears, home problems, vehicle maintenance, recreation forms, legal matters, social advices. These vary across different hospital types, income groups, gender-wise and age-wise (Baru, 2010).

It is an exhaustive overhaul to manage a multi-specialty hospital with latest techniques and cramped by the mannerisms of a digitized environment. In order to attain self-efficacy, hospital management system software is designated to do the job neatly. There are different hospital software systems used by different hospitals. The basic systems involve different user interfaces and data analysis portals to the IT administrator. The users may involve doctors, nurses, attendants, helpers, customer service and other hospital staff. The hospital administrator acts as a key to maneuvering the smooth running of such hospitals (Practo, 2015) and their complex technological advancements.

Stress management techniques have evolved over time. The ones we will be considering are the daily uplifts like the same daily hassles seen in the positive light of uplift. They again comprise dealings with friends or family, watching entertainment programmes, work related pressures, finances, health issues, personality problems, climatic conditions, political fears, home problems, vehicle maintenance, recreation forms, legal matters, social advices. These vary across different hospital types, income groups, gender-wise and age-wise. Due to the alarms of digital transformation embracing the entire country of India, its reach amongst the hospital industry is nonetheless evolving at a greater pace than before. The Indian government has started an online portal called Department of Health and Family welfare to address these concerns in a systemized way. However, right from admission to a private hospital up to the exit of a patient, in good earnest, every tiny detail gets recorded digitally. Hence we will be concerned with the stress levels in such 62 private hospitals in digital India (Government of India, 2018).

A model to mitigate stress levels has been constructed to predict the necessary control over unlimited stress level concerns. Various parameters have been considered as factors. A brief

overview of the insight into this research analysis has been considered in this section and an attempt to unravel the mystery behind the mismanaged stress level as a key competency to necessitate stress aversion involved in digital transformation.

#### **REVIEW OF LITERATURE**

The report for Altimeter, has a stance by Solis stating that there exists six stages of digital transformation as in

Figure 1: 6 stages of digital transformation below: 1) Business as usual – One has to affirm that work is to be conducted fairly unassumingly and normally well, 2) Present and active – The entire organization must drive through ways to try out methods that drive digital literacy & creativity, 3) Formalized – the relevance to business as a prime manner in which work is outlined must be meted out, 4) Strategic – Each individual must realize that they are an integral part of the organization, without which no work may be executed to its fullest potential. This shared vision will lead to more enduring strategic outlooks, 5) Converged – A dedicated digital team is formed to guide the entire handholding of the digitized processes, 6) Innovative and adaptive – Digital transformation turns out as the 'business as usual' and a well-defined bionetwork is established (Verlinden, 2018).



Figure 1: 6 stages of digital transformation

Averbrook projected one way to guise at digital transformation is to interpret it as four columns, with technology figuring as the least critical. It is the mindset of both people and the organisation that is the most important avenue to change. He outlines the four pillars, and their weights, as: Mindset: the willingness and enthusiasm for digital endeavours across the organisation – 45%, People: the specific skills and attributes among the workforce – 25%, Processes: The strategies for communicating and effecting change – 25%, and Technology: The actual software tools – 10% (Averbook, 2018)

Thus Mindset and People contribute 70%, which is more than half of the total contribution. Hence we see that willingness and enthusiasm is construed by less engagement with daily

stresses in the form of hassles and forms the basis for a successful digital transformation pathway.

Ordinary existence includes daily hassles as insignificant stressors that are a fragment of it. These stressors negatively influence distinct fitness and happiness as established in various types of study analysis. Daily hassles and global affiliation fulfillment/value are associated negatively as acknowledged in various readings. Extra accurate evidence on by what means daily hassles destabilize affiliations would be delivered to scholars and clinicians by having better unambiguity in results. Thus, in this study we extend the literature on daily hassles and connection excellence by examining the impact of aversion of daily hassles as a key competency in handling digital transformation in Human Resources in hospitals. Positive daily practices, or uplifts, may also show an imperative part above the disorderly properties of daily hassles on single contentment and liaison quality, although exploration has fixated differently.

Employees' capability to participate in adjusting doling out may differ across periods and use provisional effects contingent upon stressors. That is, trading with great points of pressure even that outside to the business— can deplete employees' means desired to keep positive associations. We use the Conservation of Resources theory (CoR) as our guiding perspective in examining how hassles may reduce relationship quality, whereas uplifts may improve relationship quality. From the CoR theory, "people strive to retain, protect, and build resources and . . . what is threatening to them is the potential loss of these valued resources". Directed by the larger communal background, resources denote whatever (e.g., objects, personal characteristics, etc.) a hospital administrator believes and are thus one-sidedly demarcated. Further than assuming that stressors get up from the budding or real damage of means and should be linked with misery and undesirable results, the CoR theory also offers that in the nonappearance of pressure hospital administrators will "strive to develop resource surpluses in order to offset the possibility of future loss". In this way, collected means may be realized as a safety measure against the probable forfeiture from impending stressors. Resource accrual reflects future-oriented discernment and a hands-on method to handling forthcoming actions. Reserve excesses thus would be allied with extra helpful aftermaths. Unswerving with the CoR theory, we intellectualize uplifting events that make a hospital administrator sense bliss or willingness as adding to one's resources, whereas hassles diminish these assets. While not explicit to the association, peripheral hassles and uplifts (i.e., those not involving the employees) must still control the connection known that trials from one purview of life advance into other purviews of being. From the CoR perspective, a decline in personal assets had better disturb individuals' dealings with their peers as reflected in daily affiliation quality. For example, if my day was predominantly nerve-wracking and I sensed burdened in footings of my stages of life, these moods may spread, distressing how I relate with my peer, including my feelings of gratification and struggle on that day. In a similar way, stressors external to contacts reduced the capacity of peers to interact with each other in adjusted ways and thus reduced bond quality. Whereas hassles should cut the quality of relations between peers by grabbing available resources, uplifts are expected to mend positive relationship quality by adding to individuals' resources. In addition to separate effects, it is possible that hassles and uplifts combine in some way. For example, although hassles should be linked with less optimistic, and more adverse, spirits about the rapport, experiencing amplified uplifts along with hassles may reduce this

effect. It is also possible, that uplifts may pay to optimistic feelings about the relationship that dispel in the existence of increased hassles. In this study, we construct a model to mitigate the daily hassles or stress levels (Totenhagen, Serido, Curran, & Butler, 2012).

## RESEARCH METHODOLOGY

The problem statement will define the pertinent business conclusion part. One of the soft factors acting as a key competency in digital transformation is managing the enthusiasm and willingness of the hospital administrators. The way to reach that aim is to reduce daily hassles of these employees. To predict certainty in reducing stress levels we must aim to construe a specific stress aversion model. The depletion of stress will ensure smooth functioning of the operating competencies to drive human resources digital transformation. If stress is not a cause of concern, patients will be served better and the business strengths will grow by leaps and bounds. The following research questions will be answered: 1) Does stress exist among hospital administrators of private hospitals? 2) Could one compare the various factors affecting stress levels? 3) Could one make a stress reduction formula to compute how stress may be reduced?

The existence of stress, its comparison among various factors, and the deduction of a model to calculate stress level have to be done warily. The need of this study contributes to the 70% success factor in devising a full-proof digital transformation in private hospitals. The area under analysis is chosen as hospitals because of the competition levels rising among major players to reach highest levels of competence. The objectives of the study are thus construed as follows: 1) To study the stress levels, if present among administrators of private hospitals. 2) To compare the various factors dependent on stress 3) To find the main factors as the cause of stress by devising a model to avert stress. The following three hypotheses may be devised:  $H_{01}$ : There is no stress (hassles) among administrators of private hospitals in Greater Mumbai.  $H_{02}$ : Stress levels (hassles) of hospital administrators are independent of their educational qualifications, monthly income, gender, age and marital status.  $H_{03}$ : Stress levels (hassles) used by hospital administrators are independent of their educational qualifications, monthly income, gender, age and marital status.

The first two hypotheses examine the existence and dependence of stress levels among administrators of private hospitals in Greater Mumbai. The third hypotheses will be examining the relation between stress level and the factors of hospital administrators and also will construct a model to avoid stress. Rejection of the three hypotheses will affirm the dependence of stress levels on the various parameters and will later on indicate the need to devise a model to mitigate stress levels. Then a model will be formed based on the evidences gathered till then. The data collection plan involved direct verbal correspondence with the 6 private hospital administrators. 62 administrators of private hospitals were given questionnaires that were filled under personal supervision in the year 2017.

The research tool used is SPSS 16.0. The literature review was exhaustively taken from online sources, ProQuest and Ebsco databases, Harvard Business Review articles, online working papers/ theses, and numerous e-articles. The insights from this vast literature helped to fragment

down to basic levels of arriving at a business decision. The sample size taken was equal to the population size to attain accuracy of results. Hence out of 62 hospitals of private types, all 62 hospital administrators were interviewed. The results were collated and represented in the sections that follow.

## DATA INTERPRETATION/ANALYSIS

Hence, from the table below more than half of the total stress levels (58.3%~36 cases) in percentages have moderate to severe stress. Hence we interpret that stress levels exist among administrators of private hospitals. We thus reject Ho1, and analyze that there exists a relation between stress levels and private hospital type as in table 1.

Table 1: Type of hospital \* Stress levels Cross-tabulation with Chi-Square tests

	Ty	pe of hospital * Sti	ress levels C	ross-tabulat	ion		
				Stress levels			
			No stress	Moderat e stress	Severe stress	Total	
		Count	26	35	1	62	
Type of	pe of Private	% within Type of hospital	41.90%	56.50%	1.60%	100.00%	
hospital	Frivate	% within Stress levels	100.00%	100.00%	100.00%	100.00%	
		% of Total	41.90%	56.50%	1.60%	100.00%	
		Count	26	35	1	62	
Total		% within Type of hospital	41.90%	56.50%	1.60%	100.00%	
10	เสเ	% within Stress levels	100.00%	100.00%	100.00%	100.00%	
		% of Total	41.90%	56.50%	1.60%	100.00%	

Chi-Square Tests						
	Value					
Pearson Chi-Square	a					
N of Valid Cases	62					
a. No statistics are comp	outed because Type of hospital is a constant.					

If R-square value is of 70% or more, then model is stronger for prediction. Here, since it is lesser than 70%, we ignore the model as in Table 2: Model Summary. Also, P value is greater than 0.05, so we accept Ho, that model is not significant.

**Table 2: Model Summary** 

Model Summary <sup>b</sup>							
Model	R	R Square	Adjusted R	Std. Error of	Change Statistics		

			Square	the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.262ª	.069	019	.531	.069	.784	5	53	.566

a. Predictors: (Constant), Ed Qual, Monthly Income, Marital Status, Gender, Age

**Table 3: Coefficients** 

				Coefficient	s	1	1		
Model				Standardized Coefficients	t	Sig.		Correlations	3
		В	Std. Error	Beta			Zero- order	Partial	Part
	(Constant)	2.724	.725		3.756	.000			
	Monthly Income	.025	.129	.034	.197	.845	061	.027	.026
1	Gender	068	.162	062	419	.677	014	057	055
	Age	233	.146	277	-1.593	.117	153	214	211
	Marital Status	265	.292	128	906	.369	057	124	120
	Ed Qual	131	.100	184	-1.312	.195	111	177	174
	a. Dependent Var	riable: Stress	levels						

The devised model from above table, that is, Table 3: Coefficients, may be written as:

Stress level =  $2.724 + 0.025 \times (Monthly income) - 0.068 \times (Gender) - (0.233) \times (Age) - 0.265 \times (Marital status) - 0.131 \times (Educational Qualifications)$ 

## **FINDINGS & CONCLUSION**

The findings of the result claim that there exist stress levels among administrators of private hospitals. A model, which is not as significant or strong enough, is developed to compute the stress level, which is as under.

Stress level = 2.724 + 0.025 x (Monthly income) -0.068 x (Gender) -(0.233) x (Age) -0.265 x (Marital status) -0.131 x (Educational Qualifications)

For instance, if monthly income is Rs. 29,000, gender is female, age is 39, marital status is married, and educational qualification is post-graduate, then fitting it into the formula would result as values of 1 = "No stress", 2 = "Moderate stress" and 3 = "Severe stress".

The

Table 4 : Nomenclature, defining the other nomenclatures is as follows:

**Table 4: Nomenclature** 

b. Dependent Variable: Stress levels

Heading	Nomenclature			
	Less than 15,000	1		
Monthly income	15,000 to 30,000	2		
Within mediae	30,000 to 50,000	3		
	More than 50,000	4		
Gender	Male			
Gender	Female	2		
	16-24	1		
	25-35	2		
Age	36-50	3		
	15,000 to 30,000 30,000 to 50,000 More than 50,000 Male Female 16-24 25-35	4		
Marital status	Married	1		
Wantai status	Single	2		
Educational	Doctoral studies	1		
Qualifications	Post-Graduate	2		
Quantications	Graduate	3		

Here it will be as Stress level = 2.724 + 0.025 x (Monthly income=2) -0.068 x (Gender=2) -(0.233) x (Age=3) -0.265 x (Marital status=1) -0.131 x (Educational Qualifications=2)

That is, Stress level = 2.724+(0.025x1)-(0.068x2)-(0.233x3)-(0.265x1)-(0.131x2) = 1.387, which is closer to "1" as 'No stress'.

To, make the model stronger and more significant the study may be extended to other hospital types and more regions other than Greater Mumbai. A similar model may be developed and it will help to reduce stress invariably towards effective, digital transformation.

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# A Study on Digitalization of Matchmaking for Marriages in India

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## **ABSTRACT**

India being a culturally rich country and a country with traditions, for decades when it comes to prospects for marriages, Indians were solely dependent on contacts within the society, particularly through contacts in their family. Traditionally extended family, friends, marriage brokers and newspaper advertisements helped in finding a potential match for marriage. The selection of matches was governed by factors like caste, sub-caste, economic background, education level, character of an individual, horoscopes, etc.

The adoption of internet, however, revolutionized the matrimony industry giving rise to an entirely new business model of online matrimonial portals. During 1990s the internet penetration was poor in India and even the conservative Indian society was not ready to let go of the traditional arranged marriage process. However, as the internet adoption increased in India, the acceptance of the matrimonial companies increased. Matchmaking companies gained popularity because of their huge database of potential matches and convenient and secured services. Today apart from matchmaking services matrimonial companies also provide services like wedding planning and honeymoon packages.

Matrimonial companies use Search Engine Optimization (SEO) and Search Engine Marketing (SEM) strategies to drive traffic to their websites, thereby increasing visibility. The only difference between these strategies is that SEO is an unpaid strategy whereas SEM is paid advertising strategy (Dalia, 7 Easy Ways to Promote Your Matrimonial Business Online in 2019, 2018). These strategies help in improving the ranking of websites on search engines like Google, Yahoo and Bing.

Online matrimonial companies revolutionised the traditional marriage concept and created an amalgamation of traditional and modern marriage concept. The rise of online matrimonial websites gave young Indians the decision making power in choosing their life partners. The development of social media apps made companies to lean towards social media marketing strategies. The matrimonial companies now use various social media platforms like Facebook, Instagram and Twitter to acquire new customers.

The authors would like to suggest that matchmaking companies should focus on blog marketing which is a growing trend in the matrimony industry which has potential to increase the user base

of the matrimonial websites. Companies with marketing budgets should opt for SEM strategies rather SEO strategies as SEM strategies help to acquire leads instantly. This will prevent deterioration of their ranking in primary search results.

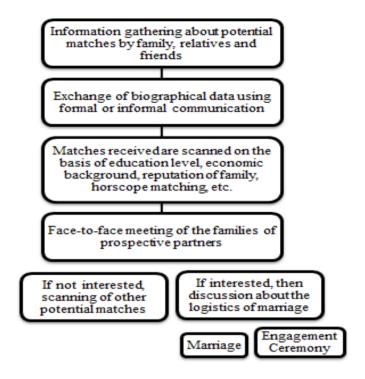
**Keywords:** Digitalization, Internet, matchmaking, matrimonial companies, SEO & SEM strategies.

#### INTRODUCTION

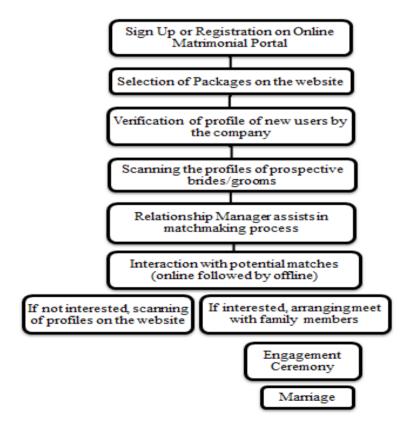
Matrimonial websites primarily begin for non-resident Indians as the internet adoption was poor in India during the 90s. Also, the conservative Indian society was skeptical about the matrimonial companies. The companies identified the gap in the traditional marriage process and the changing mindset of Indian society which gave birth to matrimonial portals in India. By 2000s the matrimonial portals started gaining popularity. The complex process of arranged marriages was simplified by the introduction of these portals. Such websites blended the traditional arranged marriages and love marriages with the help of technology (How matrimony industry is growing with Online Matrimonial, 2017). According to the report by Ken Research Pvt. Ltd., the revenue generated by the industry has increased an average of 2% annually from 2010 to 2015, and is expected to reach Rs. 20.6 billion by 2020 (Upadhyay, 2017).

Online matrimonial sites are user friendly and have a huge database of prospective brides and grooms at one click. These websites offer security to the users and hence even elders prefer their children explore such websites. Traditionally matrimonial sites have marketed themselves to the prospective brides and their families only. The advertisements of various portals like JeevanSaathi.com, Shaadi.com and BharatMatrimony.com have targeted females and revolve around the existing fear of marriages and finding a suitable partner. These marketing strategies were stereotypical representation of marriages (Malpani, 2015).

Today, companies are shifting their focus towards digital marketing strategies. Many companies are focusing on social media marketing, search engine optimization, search engine marketing, blog writing, etc. Companies have recognized the increased usage of mobile phones and various apps thereby opting for digital marketing strategies. Thus the boom of the internet not only revolutionized the matrimony industry, but also changed the way the industry marketed itself.



## ONLINE PROCESS OF MATCH MAKING:



# TRANSFORMING MATRIMONIAL COMPANIES WITH THE ADVENT OF INTERNET:

For centuries Indians have put emphasis on family relationships instead of personal autonomy. Children from a young age are conditioned to put family interests before their own interests. Marriage being one of the most important social institutions in India is heavily influenced by the traditions. Hence, arranged marriages are still quite common in India. In Indian society, marriages are perceived to have long lasting implications on the families. Therefore, many people opt for arranged marriages as they provide a sense of emotional security and economic stability (Seth & Patnayakuni, 2008).

However, over past few decades, there has been a shift in family structure, from joint families to nuclear families. This led to the absence of social networks that generally helped in the arranged marriage process. Also, with the boom of the internet, the traditional role of the joint family and marriage brokers was replaced by online matrimonial portals. Introduction of technology in this field has led to a blend of traditional and modern marriages.

Matrimonial websites gained popularity among people with traditional beliefs, but still preferred to find their partners on their own. The online matrimony industry blossomed in huge business opportunity because of its unique features. These portals have huge database with global presence. The higher the prospective profiles, the higher the customer satisfaction (Krishnan, K., A.V., & VishwaVidyapeetham, 2018). These websites have made searching for a life partner more convenient and secure.

Today, many companies provide relationship managers that assist in the matchmaking process. Matrimonial companies are also aiming towards becoming one stop shop solution for their clients by providing services from matchmaking, wedding planning, designing and printing wedding cards to honeymoon packages (Gupta, History Of Matrimonial Sites, 2015). This is becoming a competitive advantage for them, which help them to differentiate themselves from competitors.

#### MAJOR COMPETITORS IN ONLINE MATRIMONY SECTOR:

The online matrimonial industry is highly competitive and is dominated by following four competitors (Gupta, Amazing Facts About Matrimonial Sites, 2015)

**Shaadi.com** – Shaadi.com is one of the oldest matrimonial portals in India. It was founded in July, 1996. The company has around 250 centers across India with more than 10 million registered users. Shaadi.com is known to use big data analytics to analyze the user behavior on the website and calculate the compatibility of the couples and provide recommendations to users. The unique features such as regional registration, shaadi live messenger, customized ringtones, smart search option etc. are provided by Shaadi.com.

**JeevanSaathi.com** – JeevanSaathi.com is popular in Northern and Western India. It was founded in December, 1998. The members can opt for different packages by paying a varying amount of fees with respect to the service they want.

**BharatMatrimony.com** – BharatMatrimony.com was found in December, 1999. It is well known for its regional portals across India and these portals operate in 15 different languages. The services provided include wedding directory, pre-marriage counseling, blood testing services etc.

**SimplyMarry.com** – SimplyMarry.com was established in December, 2006. This portal is the most technologically advanced site and users can register on the website for 3 – 12 months. This website provides various interaction options like profile linking, personal chatting, etc. Company has launched TimesSoulmate.com and TimesAssistedMatrimony.com in 2017.

## **Niche Players**

With the success of matrimonial websites that catered to the mass market, various portals catering to niche segments started gaining popularity. SecondShaadi.com is a website that caters to individuals who are divorced or widowed, thus giving to remarriage which still is a social taboo. Ultra Rich Match, Elite Matrimony, VIP Shaadi and many more similar websites are known to cater to the elite class Vows of Eternity is a matrimonial portal with a global presence and caters to the upper class. It is headquartered in New York and has its branches in London, Singapore, Delhi and Mumbai. There are several other websites that cater to specific caste, religion, education level, etc.

## ONLINE PROCESS AS A PREFERRED CHOICE

## **Search Engine Optimization**

Search Engine Optimization (SEO) is a process of driving traffic and increasing visibility of a website or a web page from search results on search engines. These are the unpaid results which are often referred as free, natural, organic, editorial or earned results. All major search engines like Google, Yahoo or Bing, which show web pages and other content on the basis of the relevance to users.

Matrimonial companies are known to carry out SEO activity to drive traffic to their websites, thereby increasing visibility. Matrimonial websites are performing a SEO activity to improve their ranking on Google. Companies carry out on On-page SEO wherein five keywords related to companies are searched on Google, which is followed by clicking on company page and spending 30 seconds on the website each time.

Following is the result of SEO activity performed by one of the matrimonial company, Ultra Rich Match during the months, May & June of 2018 which helped to improve the website's ranking on Google.

	Position in Google Search						
Keywords	On 22 <sup>nd</sup> May, 2018	On 30 <sup>th</sup> June, 2018	On 10 <sup>th</sup> February, 2019				
Matrimony for Rich	Page 1, 1 <sup>st</sup> position	Page 1, 1 <sup>st</sup> position	Page 1, 1 <sup>st</sup> position				
Matrimony for Business Families	Page 4	Page 1, 5 <sup>th</sup> position	Page 1, 2 <sup>nd</sup> position				
Matrimony for Business Class	Page 1, 7 <sup>th</sup> position	Page 1, 3 <sup>rd</sup> position	Page 1, 2 <sup>nd</sup> position				
Match making for Elite Business Class	Page 1, 4 <sup>th</sup> position	Page 1, 1 <sup>st</sup> position	Page 1, 1 <sup>st</sup> position				
Matrimony for Elite Class	Page 8	Page 1, 4 <sup>th</sup> position	Page 1, 1 <sup>st</sup> position				

Source: Researcher's own data

## **SEARCH ENGINE MARKETING:**

Search Engine Marketing (SEM) is a form of paid advertising wherein websites can be promoted by increasing their visibility in search engine results. The Pay Per Click campaign becomes hit with the right content at the right time. Maharashtra's leading matrimonial website, Anuroop Wiwaha used SEM strategy to enhance brand awareness, generate leads and increase sales (Dalia, 2018).

#### **SOCIAL MEDIA MARKETING:**

#### a) Social Media Platforms

Social Media Marketing (SMM) involves creating and sharing content on social media platforms like Facebook, YouTube, Twitter, Instagram, LinkedIn, etc. Today many matrimonial companies use social media platforms to target and attract prospective customers such companies focus on creating engaging content which the people can like, share and comment on. This in turn helps to increase the followers of these companies on various social media platforms.

When using social media platforms like Facebook, Instagram and Twitter, companies use various hashtags. This helps to put the content in front of the right audience and drives traffic to the other social media platforms or the main website which in turn increases the traffic. Companies use hashtags like #couple, #wedding, #relationshipgoals, etc. on its social media platforms to drive traffic on its website.

Shaadi.com used SMM to spread awareness against the evils of dowry by launching a game called "Angry Brides" on its social media platforms. Marathi actress, Mrunmayee Deshpande became a face of outdoor campaigns of MarathiMatrimony.com when she found her life partner

through the website. This helped to create brand awareness about the company and increased visitors on the website and resulted in lead generation (Dalia, 2018).

YouTube is another social media platform which is popular amongst matrimonial companies. Many companies that don't have massive advertisement budgets opt for YouTube videos. These videos are like TV advertisements for such companies which in attracting the potential clients. With the help of YouTube videos, companies can customised their content as per their target audience with minimal costs. Companies have their own YouTube channel which consists of short videos that focus on unique selling proposition (USP) of the company. There are few companies that feature videos highlighting the CSR activities carried out by the organisations. These videos act as emotional adverts which help in creating a positive image in the minds of customers.

## b) Blogs

Blogging has become a very popular activity among online matrimonial companies. The number of matrimonial companies creating and maintaining blogs has increased exponentially. Many companies publicise their brand and services via the medium of blogs. Generally the matrimonial websites post wedding related blogs like wedding destinations, different types of marriage processes, honeymoon destinations etc.

One of the matrimonial companies, Ultra Rich Match has its own WordPress website where it posts various blogs that are as per the taste of its clientele. URM being a matrimonial site for elite class focus on blogs that feature luxury products and premium services available worldwide. The blogs also cover the lifestyle adopted by the elite class. This helps in attracting the target audience and indirectly drives them towards the main service provided by the company.

## **Diet Likes Celebs (Blog)**

The blog captures the lifestyle of rich people. Elite class people are always under scrutiny of media and the general public and hence care more about their fitness. Due to which, many of them follow strict diet plans. The blog explains the crux of the Zone diet, the science behind it, how it should be followed, what types of food should be consumed and who have followed this diet till now. The Zone Diet sheds light on the most important fact that Indians consume fewer proteins and majorly consume carbohydrates and fats which causes weight gain. However, this diet focuses on reducing the intake of carbs with high glycemic index like bread, pasta and grains and increasing carbs with low glycemic index. The blog is called Diet like Celebs because this diet was followed by Jennifer Aniston and was famously known as the Jennifer Aniston diet. Also, many other celebrities like Brad Pitt, Demi Moore and Madonna followed it.



Illustration 1 – Blog on Diet Like Celebs

Source – Researcher's own data

## **CONCLUSION**

- Digitalisation of many industries occurred with the boom of the internet, but the digitalisation of the Indian marriage process was an unexpected outcome.
- Online matrimonial companies revolutionised the traditional marriage concept and created an amalgamation of traditional and modern marriage concept.
- The rise of online matrimonial websites gave young Indians the decision making power in choosing their life partners.
- Earlier companies focused only on providing a perfect match for their clients, but today the companies are aiming towards becoming a one shop stop for wedding solutions.
- The development of social media apps made companies to lean towards social media marketing strategies. The matrimonial companies now use various social media platforms like Facebook, Instagram and Twitter to acquire new customers.
- Matrimonial companies use SEO strategy to keep up the ranking on major search engines like Google, Yahoo and Bing.
- The higher the rank on primary search results, the more visitors the matrimonial website will have and these visitors may get converted to customers.
- These strategies help in creating a brand name and drive traffic on the matrimonial site which may convert into lead generations.

## **SUGGESTIONS**

- Matchmaking companies should focus on blog marketing which is a growing trend in the matrimony industry, which has potential to increase the user base of the matrimonial websites.
- Companies with marketing budgets should opt for SEM strategies rather SEO strategies as SEM strategies help to acquire leads instantly. This will prevent deterioration of their ranking in primary search results.
- Companies also need to perform a social media audit wherein the companies review on what's working, what's failing and what can be improved to get more target audience.
- Social media analytics tools like Google analytics can be used to perform the audit. Companies can perform an audit quarterly and even in some cases monthly.
- Companies should not rely only on online marketing strategy, but use both, online and offline marketing strategies where offline marketing strategy is complementary to online marketing strategy.

#### LIST OF ABBREVIATIONS

- 1. Adverts Advertisements
- 2. Carbs Carbohydrates
- 3. CSR Corporate Social Responsibility
- 4. FAQs Frequently Asked Questions
- 5. SEO Search Engine Optimization
- 6. SEM Search Engine Marketing
- 7. SMM Social Media Marketing
- 8. URM Ultra Rich Match

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# **Chatbot: Managing the Customer Service Experience**

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#### **ABSTRACT**

Customer experience (CX) is becoming a hot topic of discussion in the context of business strategy, customer service, and general business management. The customers' expectations have been evolving in the era of consumer empowerment and digital disruption. The blending of new strategic thoughts with digital technology advancements provides a tremendous opportunity for practitioners to capitalize on this emerging frontier of customer service experiences. Many companies are using artificial intelligence and other technologies to help them make faster, more informed decisions, more efficient, and effective experiences for both customers and employees

Indian banking industry has evolved and many banks have started using chatbots to offer better customer experience. These chatbots are an artificial intelligence (AI) software that can initiate a conversation with a user in natural language through messaging applications, websites, and mobile apps or through the telephone. Chatbot applications aim at streamlining the interactions between people and services and directing at enhancing customer experience. At the same time, they offer companies to improve the customer's engagement process and operational efficiency by reducing the typical cost of customer service.

The given study examines the role of Chatbot in boosting customer service in banking sector. It explores the perceptions and opinions of customer service among the bank customers. The paper aims to acquire an in-depth understanding of how customers perceive the process of integration of technology into the customer service.

**Keywords:** Chatbot, Customer Experience, Banking, Artificial Intelligence

#### INTRODUCTION

Banks play an important role in the economic development of the country. It is the financial institution that accepts deposits and channels these deposits into lending activities either directly or through capital markets (Nagabhushanam, 2011-12).

The Indian banking industry has evolved over a period of time. Banking is a customer oriented service industry. The process of delivery of service is being changed from personnel to technology-based services. In traditional banking, the customer had to visit the bank to carry out transactions. The banks competed largely on price, product, and scale of the branch network. The nature of banking services is changing phenomenally due to technological advancements. Banks are using technology to offer different forms of delivery of services such as internet

banking, mobile banking, ATMs, debit and credit cards, electronic payment systems and others. They are investing in artificial intelligence (AI), internet of things (IoT), data warehousing and data mining solutions to bring improvements in the quality of customer services and the fast processing of banking operations (Kumar, 2018).

The customer expectations are changing universally. Their expectations are based on the way interact with all kinds of service providers not restricted to banking only. Convenience, availability of service round the clock, transparency and simplicity are sought by the customers. Customer experience is vital for subsistence.

According to the EY global consumer banking survey: winning through customer experience, 55% of customers in developing markets have relationships with more than one bank. Attracting and retaining this new generation of banking customers requires banks to reinvent the customer experience (E & Y Report, 2016).

Customer experience is a difficult term to define. According to Blake Morgan, the author and customer experience futurist, customer experience is the perception the customer has about the brand. It is based on how customers engage with the company and brand, not just in a snapshot in time, but throughout the entire life cycle as a customer. It includes all channels and interactions, products and services, information and content.

In case of banking, customer experience refers to the ways in which banks engage with their customers. It can be described in the context of single interactions or as the sum total of all interactions and touchpoints over time. A strong positive experience will result in attracting and retaining customers i.e. creating loyal customers. These loyal customers also become brand advocates i.e. they help in expanding the business and customer base. In banking, the idea is to create experiences that empower customers to get what they desire — starting with fast and efficient transaction processing, easy access to relevant information and personalized service — across channels, from ATMs, self-service kiosks and mobile apps to face-to-face interactions with branch tellers or calls into contact centres (E & Y Report, 2017)

Technology is enabling banks to meet customer requirements they desire and also create positive customer experience.

## DIGITAL TRANSFORMATION IN BANKING

Banking industry is a pillar of Indian financial system and it is stricken by many challenging forces. One such force is revolution of information technology. In today's era, technology support is very important for the successful functioning of the banking sector. IT and communication technology has enlarged the role of banking sector in Indian economy. For creating an efficient banking system, which can respond adequately to the needs of growing economy, technology has a key role to play. Over the past few years, banks in India have invested heavily in the technology such as tele-banking, mobile banking, net banking, ATMs, credit cards, debit cards, electronic payment systems and data warehousing and data mining solutions, to bring improvements in quality of customer services and the fast processing of

banking operation. Heavy investments in IT have been made by the banks in the expectation of improvement in their performance. (Paritoshkumar, 2018)

The advancements in technology have brought the mobile and internet banking services to the fore. The banking sector is laying greater emphasis on providing improved services to their clients and also upgrading their technology infrastructure, in order to enhance the customer's overall experience as well as give banks a competitive edge. (IBEF report)

In the past, banks competed mostly on price, product and scale of the branch network. Banks with wider network of branches won customers through convenience and visibility. Today, however, the main competitive aspect is customer experience, which combines those traditional elements with a new prominence on simplicity and convenience of interactions across a variety of channels, responsiveness to consumer requests and a proactive approach to continuous engagement with customers — all aimed towards serving customers to improve their financial well-being.

RBI's proactive push of new technology adoption has not just been restricted to creating policy frameworks. It has used a mix of regulation, evangelism and even worked with the industry to make things easier and effective. The creation of National Payment Corporation of India (NPCI) which has considerably brought down the cost of electronic transactions is a case in point. The regulator also has an academic/research unit, Institute of Development and Research in Banking Technology (IDRBT) which keeps studying the opportunities and challenges in new technology areas. (Bakshi, 2018)

## ARTIFICIAL INTELLIGENCE IN BANKING

Artificial Intelligence has become an integral part of banking. It is redefining all aspects of banking – from digital interaction with customers to transactions and reporting. It is also helping them make faster and better financial decisions. Banks are working with Financial Technology (Fintech) firms to commercialize AI solutions for transaction monitoring and creating chatbots for customer interaction and gaining competitive advantage. AI is going to break the Internet and be bigger than the mobile revolution. (OCBC Group Newsroom, 2018)

Besides managing customer interactions, automation, process optimization and predictive analytics, Artificial Intelligence and Machine Learning are used in banking in the analysis of suspicious high-risk transactions. Financial technological institutions are developing AI based applications to help in cyber security, fraud detection and regulatory compliance functions.

Artificial Intelligence (AI) can provide swift and personalized services to each customer focusing on their specific requirements. It can be used to gather information, automatically build models based on that information, inference and communicate in natural way. In India, only large banks have introduced AI in their services. Indian banks are likely to use AI like machine learning to re-engineer back office operations. Robotics is a technology that mimics the actions of human processes. The use of robotics in the Indian banking sector though not yet prevalent, is

expected to grow in future. Robotics will help in automation of processes which are repetitive; well-structured and require less human judgement. Also, being scalable and cost effective, it could help automation of processes with high transaction volumes. AI is further enabling banking institutions and retail banking customers alike by taking massive amounts of data, and making it easily accessible to the individual account holders, in the form of a chat interface. Presently, some Indian banks have started deploying robots in the form of chatbots to answer customer queries related to banking transactions, demat account, locker facility, fixed deposit, loan, etc. Apart from humanoid robots providing customer service, software robots are also getting deployed in functions such as retail banking operations, agri-business, trade & forex, treasury and human resource management to name a few. (Dun & Bradstreet, 2019)

Through bank's mobile app or website, chatbots are now able to provide retail banking customers their credit score, enable them to set and manage their budgets, and notify them about transactions from the convenience of the mobile or desktop. More than retail banking, banking chatbots have started helping customers in money management. (Jesus, 2019)

A chatbot is a digital assistant which is piece of software that can interact with a person. They listen and respond with relevant information. They can be voice or text activated. Bots can differ based on the back-end integration of AI. This allows brands to do more for the customer than respond with basic logic. Chatbots are supposedly better than chat software which often feels like one dimensional conversation. Chatbots are more conversational where as digital or intelligent assistants go beyond bots to perform tasks that assist the user. (Morgan, 2017)

The characteristics of well-designed chatbot are:

- 1. Availability round the clock
- 2. Provides instant response to majority of the querries
- 3. Similar experience across the channels i.e. mobile, web etc
- 4. Ability to interpret languages commonly used
- 5. Response formats are easy to interpret (text, images, sound or any other)
- 6. Provides specific user input

According to Juniper Research (2019), Chatbot integration in mobile banking apps will be the main channel for chatbot-driven customer communications, accounting for 79% of successful interactions in 2023. This dominance is due to several reasons, primarily an increase in user preference for app-based banking, as well as the strong performance of early banking chatbots, such as Bank of America's Erica and others. Research author Nick Maynard explained: "Chatbots in banking allow heavily automated customer service, in a highly scalable way. This type of deployment can be crucial in digital transformation, allowing established banks to better compete with challenger banks". (Business Wire News, 2019)

## CHATBOTS AND CUSTOMER EXPERIENCE

Banking chatbots are changing the way the customer interacts with the bank. They are making it convenient for customers to access information. They are helping banks understand customers

better, and are also providing customers a simpler option to get their requirements sorted. By helping banks with last mile service delivery, chatbots are redefining customer experience. (HDFC Bank, 2019)

Chatbots are helping banks and the customers in managing following tasks:

- Customer queries: When customer accesses a bank website, it is tedious and time consuming task to navigate through various options and avail particular information. With the help of simple chatbot, the customer can reach to the right page giving the required information within lesser time.
- **Payments:** Some banks have introduced chatbots on social media platforms to help their customers with payments. These chatbots collate the different offers available to customers and consequently help them complete the payments. These chatbot help make the payment process simpler by reducing the efforts of the customer.
- Interactive Voice Response systems: Several banks have automated voice response systems to interact with the customer. The call to bank's toll free number is first directed to a chatbots which finds out what the customer needs are and directs the customer to the right place. If the required information is provided by chatbot then it lets the customer select those options and provides the information. If the chatbot cannot provide the necessary information then it connects to a customer care executive.

Above mentioned tasks are the basic ones and many banks are using AI to perform these mundane tasks and reduce dependency on manpower. The latest chatbots now help customers perform simple transactions through simple instructions. The customers can easily apply for selected loan, insurance and even Credit Cards, directly from the messenger platform.

As chatbots develop, their role expands to become more proactive – helping customers to manage their money in a better way. For example, they will track spending, warn customers occasionally in case of excessive spending and suggest action.

Through the apps, chatbots are now able to provide retail banking customers their credit score, enable them to set and manage their budgets, and notify them about transactions from the convenience of the bank's mobile application or website. More than retail banking, banking chatbots have started assisting customers in money management. (Jesus, 2019)

Over time, this proactive role will deepen, so that with prior consent, chatbots could move money between accounts, pay invoices, set up direct debits for regular bills and find the best deals for savings accounts, credit cards, utilities and maybe help with automated switching of products like Flipper does for utilities (Mistry, 2018).

## **DIFFERENT BANKS AND CHATBOTS**

Customer experience is often the deciding factor when it comes to banking. Today's customers want personalised interactions, simplified banking and access to their accounts through technology. Banks can innovate and meet customer's needs have a huge competitive advantage. (Morgan, 2018)

Not many people are comfortable letting others know the state of their finances – their account balance, loans, even salary. A chatbot is the closest channel in such scenario. It is one-on-one, private and – when done well – the conversation is held not only at a level appropriate to the customer, but also in their style of language and at a time convenient to them. The banking industry has automated various processes while cutting down customer support costs which are leading to increased business leads and user satisfaction. (Kale, 2018)

## Some Examples of Chatbots in Banking

<u>Bank of America</u>: Erica, chatbot of Bank of America was created to help customers with simple transactions such as paying down debt, checking account status and more. Bank of America also has Zelle, a peer-to-peer money transfer service that will enable customers to take out or deposit cash at ATMs through their mobile banking app.

<u>Capital One:</u> Capital One Financial has developed a "chatbot" named Eno, an automated chatbot program that can communicate with the bank's customers via text message. It helps customers to get information about their accounts and make credit-card payments from their smartphone.

<u>Wells Fargo:</u> Wells Fargo's chatbot — which doesn't have a name uses artificial intelligence to respond to natural language messages from users related to account balance, details of recent transactions, location of the the nearest bank ATM. The other features like diving deeper into spending trends and potential account offers customers have to explore.

HSBC Bank (Hong Kong): Amy is a Virtual Chat Assistant(VCA) for corporate banking at HSBC Bank (Hong Kong). Amy can provide instant support to customers' inquiries on a 24×7 basis. Available in English, traditional and simplified Chinese, Amy currently covers many product pages and its coverage is being further expanded.

<u>Commonwealth Bank Australia:</u> Ceba, chatbot of Commonwealth Bank assists customers with more than 200 banking tasks such as activating their card, checking account balance, making payments, or getting cardless cash.

## Scenario of Indian Banks

<u>HDFC Bank:</u> HDFC bank developed their own AI-based chatbot, "EVA" which has addressed over 2.7 million customer queries and communicated with over 530,000 unique users. OnChat is another AI platform which works with Facebook messenger and offers customers facilities like utility bill payments, booking cabs, bus or air or tickets etc. HDFC Bank has also launched Interactive Robotic Assistant - IRA (2.0), an interactive humanoid at its Koramangala Branch in Bengaluru, Karnataka and planning to upgrade IRA (1.0) at other places to enhance customer experience.

<u>ICICI Bank:</u> Customers of ICICI bank can use iPal the chatbot of ICICI bank on bank website as well as on mobile phone. It handles queries on bank's portal and mobile app iMobile that

includes information and financial services with nearly 90 per cent accuracy. This chatbot is developed to enhance the customer experience as well as organisational efficiency.

<u>Kotak Mahindra Bank:</u> Keya is an intelligent voicebot developed by Kotak Mahindra Bank keeping in mind the customers' changing preference for voice over text. It is built on a technology that understands a customer's query and steers the conversation to provide a quick and relevant response.

Axis Bank: Axis Bank's AI-powered Axis Aha helps customers to transfer funds, order a cheque book, pay credit card & utility bills (electricity, gas etc.), recharge mobile phone, enhance debit card limits, switching off debit card temporarily, blocking credit, debit and/or forex card and others. Bankers feel that this has resulted in improved customer satisfaction.

<u>Yes Bank:</u> Yes Bank has also partnered with Gupshup to launch YES mPower, a banking chatbot that helps customers get information about loan products offered by Yes Bank and instantly gives loan eligibility. Yes Bank plans to incrementally release more services through the chatbot, making YES mPower the one-stop shop for all loan requirements.

State Bank of India: For customers, SBI launched SIA which is an AI-based chat assistant & voice assistant. It answers customer inquiries instantly and helps customers with everyday banking tasks. SIA is set up to handle nearly 10,000 inquiries per second or 864 million per day – close to 20% of Google's worldwide traffic. SIA continuously learns with each interaction and gets better over time. Currently, it can answer inquiries on banking products and services and will soon be able to process financial transactions in many Indian regional languages across multiple customer channels in both voice and text format.

<u>Bank of Baroda</u>: Bank of Baroda has deployed a chatbot to handle customer queries related to products. This has led to greater customer satisfaction, quick response and much lower cost. However in terms of technical capabilities, it is still improving.

Many other public sector banks are also slowly enhancing the features of their apps and AI enabled chatbots / voicebots are in the pipeline.

## **VOICE OF CUSTOMER**

Interaction with customers of different banks has revealed that customers who are using net banking and mobile banking facilities are using chatbots to access information. They are happy about the ease of navigation with which they get the necessary information in less time. But when it comes to transactions using bots, tech savvy younger generation (below 40 years of age) is easily adopting the new facilities. Older customers rely on customer relationship manager for assistance or prefer to visit banks to carry out transactions. They are still not convinced about the reliability and security of such digital transactions. But slowly this will change and more and more customers will use the facilities provided by newer technology.

## **CONCLUSION:**

Growth of digital banking has changed the banking landscape in India substantially. It started with ATMs. Credit and Debit cards, internet banking and eventually moved on to mobile banking. Penetration of smart phones is also a cause for requirement of app based transactions. Promotion of cashless transactions at many places is giving boost to digital banking. Emergence of chatbot is the next step in banking technology.

Banks especially in the retail banking is facing a stiff competition not only from the players within the industry but also from NBFCs, fintech companies and large internet players. Customers are becoming more and more demanding. Customer expectations are based on their lifestyle, the way they shop, socialise and manage their lives. Convenience and availability of service as and when demanded become the important aspects of customer service. Customer experience is one of the hottest buzzwords in business these days. Customers no longer view their experiences in an industry-silo. Instead, they compare their experience to leading firms in other industries Companies are pouring more resources than ever before into building a strong customer experience and many expect to soon compete on experience rather than price or quality.

Artificial Intelligence and Machine learning are redefining the banking processes. This will help banks in automation, improved productivity, interaction with customers and overall improved customer experience. Banks are relying on chatbots for routine work and reducing the burden on workforce. They should create awareness about various facilities provided by chatbots for the benefit of the customer. These facilities will help customers in carrying out transactions at ease and round the clock creating positive experience about the service provider. Positive customer experience will lead to loyal customers resulting into wider customer base and increase in profitability.

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# Organizational Ambidexterity challenges for digital transformation

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#### **ABSTRACT**

The digital revolution is already transforming not just the organizations but entire industries. Today, the digital transformation is altering the value creation of industries where value is generated exclusively through physical materiality (Yoo et al., 2010). For example, recent digital innovations like self-driving cars, connectivity, big data, and social networks are fundamentally revolutionizing the automotive industry (Wijnen, 2013; Simonji-Elias et al., 2014; Hanelt et al., 2015; Gao et al., 2016). Going digital is now a core strategy for many organizations around the world. Recent studies point to digital as the primary force driving the business and societal changes that are affecting company operations across industries. Organizations that are failing to make the shift from the analog to digital world, irrespective of their size, scale and success, may feel like they are being hunted from all sides. As a result organizations looking to make a cut in an increasingly digital world can no longer afford to be mere spectators. However simply taking an existing product line and putting it on an e-commerce site or digitizing a customer experience is not a digital reinvention. Rather becoming a digital enterprise requires far more profound changes than merely investing in the latest digital technologies. Simply put, reinvention is a rethinking of the business itself.

## An imperative for new business models

The increasing digitization of our private, professional and public life is commonly referred to as a disruptive process that is fundamentally changing the way companies compete, create value, and engage with their business partners and customers. Organizations need to search for new business models, fundamentally rethink their operating models, revamp how they attract and foster digital talent, and consider afresh how they measure the success of their business.

Digital transformation is a technology-induced change on many levels in the organization that includes both the exploitation of digital technologies to improve existing processes, and the exploration of digital innovation, which can potentially transform the business model.

Digital transformation strategies are important, because they "reflect the pervasiveness of changes induced by digital technologies throughout an organization" (Chanias and Hess, 2016). Hence, organizations have to change traditional business models, which have been robust for many decades, and transform their organizations to adapt these trends, e.g., car sharing platforms, or new telematics services (Fitzgerald et al., 2013; Lucas et al., 2013). The growing importance of digital technology for organizations is also reflected in the alignment between IT and business, specifically in the integration of IT-strategy and business strategy in a common digital business strategy (Bharadwaj et al. 2013). While a digital strategy consolidates and aligns the IT- and business-strategy, a digital transformation strategy specifically contains the vision, planning, and implementation of the organizational change process (Matt et al. 2015). Currently,

organizations are heavily investing to adapt to these trends. However, it remains unclear which technologies will prevail, leading to tensions in the industry, as organizations do not want to give up their leadership in product and technology (Simonji-Elias et al., 2014).

## The Need for Organizational Ambidexterity

Due to the novelty and disruptive potential of digital technologies, existing organizational designs seem to be insufficient to provide the right environment to both explore new innovations and exploit their potential for the firm's business (Yoo, Boland, Lyytinen, & Majchrzak, 2012). Firms fail to make needed adaptations and adjustments to their organizational design due to high uncertainties, the high pace of changes in the environment, and connected high risks. Hence, without needed adjustments, the balance between exploration and exploitation becomes increasingly difficult.

Although these tensions can never entirely be eliminated, firms aim to actively manage them and in doing so try to maintain their competitiveness. To successfully balance exploration and exploitation is termed ambidexterity. Ambidexterity can be viewed in two different forms: structural ambidexterity refers to managing the balance by implementing "dual structures," where certain units focus on exploration while others focus on exploitation (Ducan, 1976); contextual ambidexterity means to simultaneously balance by leveraging features of the organizational context within units or teams (Gibson & Birkinshaw, 2004). Although contextual and structural ambidexterity have provided advantages, both concepts might be less suited when it comes to innovation including digital technologies. The strict separation of exploration and exploitation seems unfitting as digital technologies are requiring a greater recombination of knowledge (Dürr, Wagner, Weitzel, & Beimborn, 2017). Furthermore, by separating exploitation and exploration ambidexterity cannot incorporate the quickly changing nature of digital technologies where innovations are constantly evolving (causing exploration and exploration to be often intertwined).

In recent years, firms have made a number of attempts to realize structural ambidexterity and invest in digital innovation capabilities by bundling required capabilities for the development of digital innovations in dedicated and often separated organizational structures. These newly founded units are separated from the remaining structure of the incumbent firm in different terms such as location, mindset, collaboration, and communication.

Though leading players are making fundamental changes to their entire organizations — an essential move for building and implementing a successful business strategy in a digital world — many organizations are hesitant to undertake a digital transformation. Although this uncertainty is understandable given the perceived complexity of developing a digital strategy, experience shows that all companies can succeed with the right strategy. It also becomes pertinent to understand that the business potential of digital technology might well be dependent on the industry a company competes in and on its position in the value chain.

In fact, an IMD/Cisco report published in 2015 found that only a quarter of the companies surveyed said that they would be willing to disrupt themselves in order to compete. However, deciding when, how, and what needs to be transformed to at least keep pace with competitors is a major challenge. For incumbents, the dilemma can be particularly testing as the disruptive

technology may directly compete with their profitable existing business. This could be reduced to one sentence: "In the years before the launch of the iPod and iTunes in 2001, both Nokia and Sony had similar products under development but chose not to proceed with them, for fear of disrupting their existing business.

A fear of cannibalizing profits is just one obstacle standing in the way of incumbents looking to launch new business models. These companies often have a risk-averse culture that focuses on the present rather than the future. Managers often are very adept at running existing business units but do not have the creativity to identify radically different business models or the decisiveness to commit resources to experiment.

Because the pace of innovations has increased due to digitalization, the time between implementing an innovation (exploration) and testing and capitalizing it (exploitation) has decreased, making it a necessity to integrate exploration and exploitation more densely. Uncertainty remains on how to achieve the alignment of the two, without integrating both on an individual level but keeping the dedicated focus of the two for two separate units. It could be solved by integrating people on a temporal basis and managing an efficient flow of information and knowledge. Thus new approaches to ambidexterity are needed as with digital innovation exploitation and exploration become more interwoven.

In fact, Smith and Lewis (2011) observed that "recent ambidexterity research has adopted a paradox lens, stressing that overall organizational success depends on exploring and exploiting simultaneously" and that "ambidexterity creates demands for senior leadership to support these contradictory strategies simultaneously (Smith and Tushman 2005)" (p. 388). Smith and Lewis (2011) described exploring in terms of ensuring long-term success and exploiting in terms of achieving short-term peak performance.

The essence of organizational ambidexterity is to be found in the ability of the organization to leverage existing assets and capabilities from the mature side of the business to gain competitive advantage in new areas. In an interesting study exploring how print newspapers adjusted to digital media, Gilbert (2005) found that the problem was not the allocation of sufficient resources (e.g., investment) but the failure of the organization to change the processes necessary to use these resources effectively. To be successful at ambidexterity, leaders must be able to orchestrate the allocation of resources between the routine and new business domains.

For instance, in describing how the USA Today newspaper made the transition from print to web based news, O'Reilly and Tushman (2004) outline a series of steps that permitted first structural ambidexterity (separate newsrooms) followed by the construction of an interface to decide on the allocation of stories (daily editorial meetings) followed by a cascade of integration efforts (senior leadership communication, training, new incentives, allocation of resources) and, ultimately, an integrated newsroom. Clearly there are significant challenges to teams and firms attempting to hold paradoxical strategic intents (e.g., Smith and Lewis, 2011). Future research is needed to clarify how senior teams resolve these strategic challenges (Cao, Simsek & Zhang, 2010; O'Reilly & Tushman, 2011).

## Culture

Although organizational culture is a 'soft' element and many a times overlooked by organizations in their enthusiasm to embark upon the digital transformation journey, it has the power to make or break their digital business strategy (Kiron & Buckley, 2015). It also appears that organizational culture and identity may be an important strategic capability in hosting ambidextrous designs over time (Goia, Patvardhan, Hamilton & Corley, 2013; Chatman, Caldwell, O'Reilly & Doerr, 2013; Schultz and Hernes, 2013). For example, Tripsas' (2013) research on Fuji and Polaroid's responses to digital imaging finds that Fuji's leadership team crafted a broad strategic intent that could embrace digital as well as analog capabilities. In contrast, even though Polaroid employed an ambidextrous design to accommodate a move into digital imaging, its original analog identity and strong culture around producing boxes rather than software stunted its ability to take advantage of its digital capabilities. These culture and identity issues are important both within the firm as well as with its larger community. For example, Benner (2010) described the resistance of security analysts to incumbent firms exploring into new technologies in the photography and telephony industries. Said differently, the organizational culture that promotes a common identity and success in one domain may be misaligned when pursuing a new strategy. How can firms and their leaders promote new cultures and identities that accommodate exploration and exploitation; how can they take advantage of their history even as they move to different futures (Schultz and Hernes, 2013)?

Enabling that talent to thrive requires a digital culture, i.e., one that is customer centric and project based, with a bias for speed and continuous learning. A recent research by McKinsey lays emphasis on a culture conducive to execution. Getting the culture right is rather an uphill task for the requisite organization. The report points out that 25% of the companies polled reported that a culture averse to risk and experimentation is the biggest challenge, while another 20% percent find lack of common understanding of the organizational culture as a major impediment.

Another research by James Bughin et al. from McKinsey carried out to understand the nature, extent, and top-management implications of the progress of digitization observed a strong organizational culture is important for several reasons: it enhances the ability to perceive digital threats and opportunities, bolsters the scope of actions companies can take in response to digitization, and supports the coordinated execution of those actions across functions, departments, and business units. In fact strengths in organizational culture underpinned bolder actions. Winners were less likely to be hindered by siloed mind-sets and behavior or by a fragmented view of their customers.

## **Ambidexterity**

Because managers resolve paradoxical tensions, they contribute to an organization's ability to pursue disparate things at the same time, which is the focus of ambidexterity (Gibson and Birkinshaw 2004). Thus, ambidexterity capabilities are closely associated with the ability to resolve paradoxical tensions. In fact, Smith and Lewis (2011) observed that "recent ambidexterity research has adopted a paradox lens, stressing that overall organizational success depends on exploring and exploiting simultaneously" and that "ambidexterity creates demands for senior leadership to support these contradictory strategies simultaneously (Smith and

Tushman 2005)" (p. 388). Smith and Lewis (2011) described exploring in terms of ensuring long-term success and exploiting in terms of achieving short-term peak performance.

The distinction between exploration versus exploitation is well known from research on organizational learning. Levinthal and March (1993) argued that "[t]he basic problem confronting an organization is to engage in sufficient exploitation to ensure its current viability and, at the same time, to devote enough energy to exploration to ensure its future viability. Survival requires a balance, and the precise mix of exploitation and exploration that is optimal is hard to specify" (p. 105). Before that, March (1991) laid out a very broad notion of the two terms: "Exploration includes things captured by terms such as search, variation, risk taking, experimentation, play, flexibility, discovery, innovation. Exploitation includes such things as refinement, choice, production, efficiency, selection, implementation, execution." (p. 71).

Balancing exploration and exploitation is frequently referred to as the organizational ambidexterity problem (Raisch et al. 2009). Furthermore, it has been conceptualized as a dynamic capability based on the insight that achieving organizational ambidexterity may involve sensing environmental threats, seizing opportunities, and dynamically reconfiguring resources accordingly (O'Reilly and Tushman 2008).

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# A Study on Determinants of Attitude towards Online Video Streaming Services in India

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## **ABSTRACT**

An Over-The-Top (OTT) application is any app or service that provides a product over the Internet and bypasses traditional distribution(television) such as Netflix, Amazon Prime, Voot, Eros Now, Viu to name a few. The research paper is an attempt to explore this emerging trend and to investigate the factors affecting the consumption of OTT entertainment. A random sample of 206 respondents is studied and an exploratory factor analysis is undertaken. This noticeable shift in the consumption pattern of the consumer can be attributed to the accessibility of internet, availability of smartphones and other devices, the variety of content, pricing, perceived ease of use, peer pressure etc. This research paper has critical academic and practical implications and can be very useful for marketing professionals, students and also content creators in the OTT entertainment sector

Keywords: OTT Streaming Services, Video on Demand, Online Entertainment

#### INTRODUCTION

With technological changes, extensive digitization and fast growing internet penetration in India, the entertainment sector is seeing a sea change. Launch of OTT has put VOD in the forefront of disruption in the media. OTT stands for "over-the-top," the term used for the delivery of film and TV content via the internet, without requiring users to subscribe to a traditional cable or satellite pay TV service. The US OTT video streaming services generated an estimated \$ 20.1 billion last year (PWC Entertainment and Media Outlook 2018). The Entertainment and Media industry is expected to grow at a CAGR of 11.7% from 1978045 million to 3432044 million INR by 2022. Globally the OTT market is expected to grow at 10.11 CAGR during 2017-2022. But when it comes to India, the rate more than doubles itself.

Entertainment has always been of top priority for people. The forms of entertainment have also evolved from live plays, to cinema, then television and now digital content. This most recent platform for entertainment has shown the quickest growth. This drastic rise of OTT Streaming Services and the popularity it is gaining amongst the masses has become a concern of curious interest. The change in Consumption Pattern of consumers encouraged us to write the paper.

With this paper an attempt is made to find out and understand the latent variables influencing the usage behaviour and usage intentions for consumption of the OTT streaming services.

Technology adoption and acceptance has always been studied over years by many research personnel as every new phenomenon generates interest in the society. The OTT streaming services too are not an exception. It has had takers in the west and other developed countries since quite some time now. However this market has picked up in India very recently. There is still comparatively lesser empirical evidence and technical research in field of OTT services. Also India and the Indian consumers have their own peculiarities with respect to the consumer behaviour. Not a very large pool of recognised research is available with specific reference to Indian markets. Hence we have undertaken this research which will help us to understand the factors determining the attitude towards OTT services which would also influence the consumers and their usage intention.

## LITERATURE REVIEW AND THEORETICAL FRAMEWORK

A study of consumer adoption of OTT Streaming Services can be seen from the theoretical foundation of technology adoption viz. adoption of Video on Demand and information technology at large. Technology Acceptance Model (TAM) is based out of Theory of Reasoned Action (TRA). Unlike TRA, which is used to gauge the usage intentions and buying behaviour in general, TAM is used especially when it comes to usage intentions and buying behaviour towards information technology. Hence the current study of determination of consumer attitude towards OTT Streaming Services is constructed using TAM as a base model.

## • Technology Acceptance Model (TAM)

TAM is used to understand and analyse the impact, the external variables will have on the attitude formation and usage intentions of computer technology. As the new phenomenon like OTT Services are complex and uncertain in terms of adoption, people form attitudes and intentions towards trying to use before actual usage.

#### • Perceived Ease of Use (PEOU)

Perceived Ease of Use could be explained as the extent to which a consumer would find a particular technology easy for its usage. It helps to measure the user friendly attribute of a particular technology.

H1: PEOU will influence attitude towards OTT Streaming Services.

## • Unique Content.

Unique content refers to the types and variety in the content that the OTT Streaming Services would offer which the traditional television or other traditional mediums would not be able to provide.

H2: Unique Content will influence attitude formation towards OTT Streaming Services

#### Perceived Price

Perceived price refers to the price the consumer is ready to pay for the value which the customer thinks that he/she is deriving from consuming a product or a service

H3: Perceived Price will influence attitude towards OTT Streaming Services

## HYPOTHESIZED RESEARCH MODEL

Proposed model for the current research includes three constructs Perceived Ease of Use (PEOU), Unique Content and Perceived Price which determines the attitude (Att) towards OTT Streaming Services which mediates the effect on Usage Intentions (UI).

#### **OBJECTIVES OF THE STUDY**

The present study is undertaken to assess the determinants of the attitude towards OTT Streaming Services in India. The primary objective of the study is identify the latent variable which influences the attitude formation and has an effect on the usage intentions.

## RESEARCH METHODOLOGY

The research undertaken here is descriptive in nature with an emphasis on quantitative analysis to study the attitude formation towards OTT streaming services. Primary data has been collected with the help of a structured questionnaire All the constructs used in the questionnaire have been measured on a 5 point likert scale where 1= strongly disagree and 5 = strongly agree. Google forms were used to design the questionnaire. The same questionnaire was then circulated to the respondents via various personal and social media platforms like whatsapp, gmail, facebook to collect the primary data. Thus the study has employed a non-probability sampling technique. The 206 respondents are residents of various locations of the Mumbai city falling under various agegroups irrespective of the gender.

#### **DATA ANALYSIS**

The research includes quantitative data which has been analysed through the SPSS software. Exploratory Factor Analysis (EFA) was used for the analysis with Principal component method and varimax rotation. EFA is a very useful tool for analysis when the data has to be analysed in a way as to find out the latent and underlying variable impacting a particular phenomenon. The detailed results of the research study are mentioned as follows.

## **Reliability Statistics**

Cronbach's	Cronbach's Alpha Based on Standardized Items	N of Items
Alpha		
.923	.923	14

The research was tested for reliability and validity and the results as shown in the table above depicts a value of .923 which is considerably above the accepted value of .70. Hence it can be assumed that the research study stands true on the reliability test.

## **KMO** and Bartlett's Test

Kaiser-Meyer-Olkin Measure of S	ampling Adequacy.	.919
	Approx. Chi-Square	1644.961
Bartlett's Test of Sphericity	df	78
	Sig.	.000

The KMO and Bartlett's test for the research also brings out the sampling adequacy as shown by the figures in the table above.

Age					
		Frequency	Percent	Valid Percent	Cumulative Percent
	Below 18 years	12	5.8	5.8	5.8
	18-25 years	151	73.3	73.3	79.1
Valid	25-40 years	37	18.0	18.0	97.1
	above 40 years	6	2.9	2.9	100.0
	Total	206	100.0	100.0	

As can be seen from the figures in the table the respondents have a majority in the age group of 18-25 years and a little spills over to the next age group. This youth centric age group is generally the target audience for the content creators and distributors of the OTT streaming services.

Incom	e				
		Frequency	Percent	Valid Percent	Cumulative Percent
	Below 5 Lacs	154	74.8	74.8	74.8
	5-10 Lacs	34	16.5	16.5	91.3
Valid	10-15 Lacs	5	2.4	2.4	93.7
	Above 15 Lacs	13	6.3	6.3	100.0
	Total	206	100.0	100.0	

Income category having the highest responses which is below 5 lacs is also complementary with the age group with highest response which is 18-25. The average middle class is the target market for the OTT streaming services.

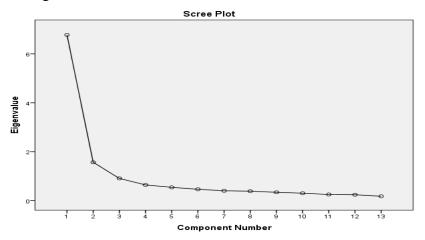
## **Total Variance Explained**

I	Compone	Initial Eigenvalues			Extraction Sums of			Rotation Sums of Squared		
	nt				Squared Loadings			Loadings		
		Total	% of	Cumulativ	Total	% of	Cumulativ	Total	% of	Cumulativ
			Variance	e %		Variance	e %		Variance	e %

1	6.777	52.130	52.130	6.777	52.130	52.130	3.805	29.266	29.266
2	1.567	12.054	64.184	1.567	12.054	64.184	3.361	25.858	55.124
3	.909	6.992	71.175	.909	6.992	71.175	2.087	16.052	71.175
4	.642	4.939	76.114						
5	.543	4.177	80.291						
6	.464	3.571	83.861						
7	.402	3.094	86.956						
8	.384	2.956	89.912						
9	.341	2.620	92.531						
10	.302	2.321	94.852						
11	.251	1.932	96.785						
12	.240	1.849	98.633						
13	.178	1.367	100.000						

Extraction Method: Principal Component Analysis.

As can be seen by the figures in the table above, 3 variables that is unique content, perceived price and perceived ease of use seem to have over 71% of the influence on attitude formation towards OTT streaming services.



The Scree Plot shows the fraction of total variance in data. The scree plot also highlights the significance of a few factors over the others as shown in the figure.

## **Rotated Component Matrix**

	C	Component		
	1	2	3	
I would prefer OTT sites over traditional television	.194	.837	.114	
Content Available on OTT sites is to my liking	.345	.771	.086	
OTT services have become a very regular and important source of	.307	.734	.184	
entertainment for me				
OTT services are very affordable and pocket friendly	.075	.336	.713	
Price is not an important factor in deciding about OTT services	.325	017	.769	

I would not mind paying higher prices for subscription to the OTT	.107	.047	.849
services			
I find OTT services to be very user friendly	.704	.479	.232
It is easy to learn handling/operating OTT services on all devices	.779	.342	.231
I do not find any technical trouble in using OTT services	.811	.090	.182
OTT entertainment comes in very handy while travelling	.647	.518	.182
OTT services are very easily available	.734	.406	.174
Various offers for first time users are encouraging or influential in	.679	.471	.084
opting for OTT services			
Content available on OTT sites is unique and not available on	.504	.634	.001
traditional television			

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Rotation converged in 6 iterations.

As seen by the figures in the Rotated Component Matrix, all the constructs show a value of above .634 on their respective factors. Hence it can be deduced that Unique Content, Perceived Price and Perceived Ease of Use are the critical underlying variables in attitude formation towards OTT streaming services.

#### DISCUSSION

The prime objective of this paper was to identify and understand the latent variables which influence the attitude formation towards OTT Streaming Services. The study has shown that Perceived Price, Unique Content and Perceived Ease of Use have proven to be the critical factors in Attitude Determination which would further influence usage intentions.

#### **CONCLUSION**

Easy availability of smartphones and other electronic devices and accessibility to internet in combination have played a significant part to facilitate the surge of OTT Streaming Services. Factors such as ease of handling the technology coupled with highly exclusive and relevant content at a very reasonable and affordable price have proved to be the recipe for success for the OTT Streaming Services market at large.

The research will be helpful to researchers who can further build a model and test it statistically using Confirmatory factor analysis (CFA). The research also provides crucial insights to marketing practitioners and professionals and content creators on online platforms to plan and implement their strategies focusing on the factors as found.

#### LIMITATIONS AND SCOPE FOR FURTHER RESEARCH

Every research study has certain limitations and this study too is not an exception in that regard. This cannot be considered to be the final study as further research can be undertaken to understand the actual buying behaviour based on this study. This research has limitations due to sample size, and skewedness towards a particular age group.

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# Impact of Digitalization and Technological Advancement on Human Resource Function

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#### **ABSTRACT**

Digitization is of crucial importance to data processing, storage and transmission, it plays a leading role because it "allows all kinds of information in all formats to be carried with the same efficiency and also interblend". Unlike an analog data, which typically suffers from some loss of quality as each time it is copied or transmitted, digital data can, in theory, be propagated indefinitely with an absolutely no degradation. This is the reason why it is a favoured way of preserving information for many organizations around the world.

This study has been carried out to understand the impact of technology advancement in Human Resource function. Further it captured the perception of factors impacted due to Digitalization and technology advancement. A questionnaire was designed to capture the above elements and data has been collected from 110 respondents from various industries. The data has been further sub-divided into male and female which has 76 and 34 respondents respectively. The data was also further sub-divided into large and medium scale industry which has 62 and 48 respondents respectively.

The results indicated that Technology Advancement impacted the most within Human resource function in the area of Performance Management, followed by Communication, Training and Development, Compensation and Benefits and lastly Recruitment and On-boarding. The study further showed that it impacted the most in terms of managing time better, increasing the efficiency of work, increasing the speed and pace of work besides other 10 factors. A total of 13 factors were studied for the same. The further analysis based on Gender did not show any significant difference in the perception of importance of factors. However the analysis based on level of industries had significant difference in many factors.

**Keywords:** digitalization, technology advancement, HR function

## INTRODUCTION

Technology has affected human resource management in various ways (Kossek, 1987). The impact of it is the rapid structural changes in India were evolution and development of technological sophistication is seen. Indian organizations needed to cope with the need to develop a highly tech diverse work force into well trained, motivated and efficient employees with the subsequent de – skilling, re- retaining and multi skilling problems, workforce reduction policies, retention and career development (Venkata Ratnam, 1995) It has increased access, enabled employees to be privy of the information that was once only a managerial prospective,

which has ramifications for power relations and task environments that encourages additional strategic human resource management (SHRM) innovations (Kossek, 1987).

As the Human Resource functions and the demand for services in the organization continue to grow in scope and depth, so does the need for multi-functional, operationally effective, adaptable information system to support service and data requirements arises. With many functions to track and huge a amount of information to process frequently and accurately, the HR executives have turned to information technology (IT) to help them meet their organization's information needs and goal. Human Resources (HR) and information technology are the two elements that many firms are learning to use as a strategic weapons to compete (Jenkins & Lloyd, 1985). In order to capitalize on the synergy between these two assets, human resource information systems (HRIS) is an emerging exploratory area that is leading human resource management into a new era. Human Resource Information System uses the information technology developments and features for an effective functioning of the HR processes in the organization.

In the current competitive marketplace, technological innovation is very critical for the organization success and sustainability. Whereas an effective management of an organization's human resources has also become a critical issue for ensuring sustained technological innovation ability. Human recourses management literature stresses on the importance of people in enhancing industrial firms' performance and creating a competitive advantage. Higher the quality of human resources enable organizations to compete on the basis of market responsiveness, quality of product and services, differentiated products, and technological innovation, many companies are now trying to add value to their human resources management HRM (Abdullah et al., 2009). However, a 'bundle' of human resource practices need to be combined together to have more influence to an innovative environment (Laursen & Foss, 2003).

#### **OBJECTIVE OF THE STUDY**

Under these circumstances, it would be interesting to understand the impact of technology advancement in Human Resource function. This study is initiated with the objective to understand perceived impact of use of automation in various HR functional areas such as Recruitment and On-boarding, Compensation and Benefits, Training and Development, Performance Management and Communication. Further the study was carried out to see the impact on various factors such as day to day routine operations, effectiveness of work, time management, efficiency, speed, productivity, cost savings, quality improvement, standardization, work life balance, work environment, strategic business partner and managing change. The perceived impact on HR areas and factors were examined across gender and levels to understand the significant difference among them.

#### LITERATURE REVIEW

Human resources are one of those industries, which usually does not quite make its way into the science fiction books, certainly its said that no kid grows up thinking of revolutionizing the

growing technology in the market, Industry changed even if the technology at its infancy as it wasn't designed for HR to begin with.

Given the rough size of the global recruitment market, the traditional paper-résumé-screen-interview-selection method is hardly the most optimum way in matching talent for the right job. Online recruiting and applicant tracking systems has brought great efficiency to the process, but social recruiting has remained a realm apart in providing global businesses a solution to build an effective workforce.

It's simple to state that recruitment technology is bringing about a change in candidate experience. This is what many would like to call, a primitive to employee engagement – namely candidate engagement. Why candidate engagement? Simply because, employers are now increasingly aware of the impact a job application process that is on their employer brand, future employee engagement and retention levels. In a bid to create favorable candidate experiences, employers are looking to rise above the usual résumé and screen processes, moving to something we call: Gamification. With game mechanics and simulated environments, employers can test employees more on hands-on skills, doing away with bookish knowledge. It also delivers at great length to a positive brand memory and recall.

Various kinds of studies have been made and many books have been written regarding the role of technology advancement on Human Resource Management. A review of literature reveals that: The role of technology in HRM can be traced back in the last decade of 20th century. Ruel et al. (2007) have explored that the term e-HRM was first that was used in the late 1990's when e-commerce was sweeping the business world and e-HRM is internal application of e-business techniques. It helps the management or organization in more effective and efficient flow of information and method of doing HRM. Organizations was able to manage a lot of HR processes in a very effective manner with the advancement of technology. This in turn has helped HRM professionals to play a strategic role and an important role in attaining improved competitive advantage. The need for attracting, retaining, and motivating employees, meeting the demands for a more strategic HR function, and managing the "human element" of technological change in the future has been enabled by advancements in technology to meet the challenges of HRM.

Managers can utilize technology advancement or software as a tool in general as well as in human resourcing functions in particular to increase the capabilities of the organization. Highlighting the impact of technology advancement applications on HRM in banking sector, Iraz & Yildirim (2004), explained the role of technology in e-learning. From the above-mentioned studies, it can be concluded that HR is now being considered as an integral part of the organization. It is not limited to procuring and utilizing manpower only. Information Technology has made a great impact on the increasing the effectiveness and widening the role of HR function. HRIS system helps employees to add and modify information relating to them and view their reports.

#### **DATA COLLECTION**

Based on a survey of literature and the authors' own experience with the HR function, a questionnaire was developed. (See **Appendix 1**). The questionnaire focused on collecting data

on two folds – one was focused on understanding which systems within HR function was used to automate using information technology, secondly which factors benefited due to information technology.

The questionnaire was administered either through e-mail or in person to around 150 respondents however only 110 responses were found to be usable.

## **ANALYSIS, FINDINGS AND DISCUSSIONS**

Data preparation involved transferring the questionnaire into an electronic format, which enabled data processing. The data was obtained from the completed questionnaires was compiled using Microsoft Excel Spreadsheets. The data was processed using the SPSS (Statistical Package for the Social Sciences) software Ver-20.

## 5.1 Reliability Analysis

To check the content validity of the questionnaire, various opinion from different sources were taken and the components of the questionnaire were modified as per their suggestions. Cronbach's Alpha Reliability Index was used to evaluate internal consistency of each construct. A minimum of 0.5 is considered as satisfactory level during the early stage of any research and a score of over 0.7 is considered to be a good level. The reliability for this sample was found to be 0.936 which indicates a high level of consistency for the scale. (*Refer to Table 1*).

## 5.2 Perceived impact of use of automation in various HR functional areas

Table 2 and Table 3 ranks the order of the five HR areas based on their mean scores. Table 2 shows the rank-ordered mean scores based on Gender i.e. Male and Female and Table 3 shows the rank-ordered mean scores based on Industry i.e. Medium and Large scale. Overall the following areas are included namely 'recruitment and on-boarding', 'compensation and benefits', 'training and development', 'performance management' and 'communication'.

Overall 'performance management' with 80% respondents responding positively that information technology is used to automate performance management. This indicates that out of 110 respondents, 88 respondents indicated that information technology is being used to automate this HR functional area. This was followed by 'communication' which received around 70.91% positive response for the said area. Then it was 'training and development' which received 61.82% and 'compensation and benefit' receiving 54.55% positive response. Last preferred choice was for 'recruitment and on-boarding' which received 43.64%. This indicates the recruitment and on-boarding is not yet fully automated in various organizations. The total of all the areas is not equal to 100% as the respondents had the option of selecting more than one HR area which they believed information technology was used to automate the various systems within the organization.

**Table 2** further shows the difference among gender for the rank-ordered mean scores for the use of information technology for automation among various HR areas. The two areas where there is some difference seen are 'compensation and benefits' and 'training and development'. Female

have ranked 'compensation and benefits' higher than their male counterpart respondents. Female respondents have ranked compensation and benefits as rank ordered 1<sup>st</sup> whereas male respondents have ranked the same as 4<sup>th</sup>. Male have ranked 'training and development' higher their female counterpart respondents. Male respondents have ranked 'training and development' as rank ordered 2<sup>nd</sup> whereas female respondents have ranked the same as 5<sup>th</sup>.

**Table 3** further shows the difference among different scales of industries for the rank-ordered for the use of information technology for automation among various HR areas. The difference among medium-scale and large-scale industries was not seen to be a major one. The difference between overall and industries also tend to be more or less similar.

## 5.3 Perceived impact on various factors

One of the objectives of this study is to understand the difference in perception of various factors impacted due to technological advancement in HR function among gender and various scales of industries. In this sample of 110 respondents, there are 76 males and 34 females, whereas there are 48 respondents from medium scale and 62 respondents from large scale industries. This is done by taking the mean score of each factor overall and also gender wise and industry wise and then ranking them accordingly.

With respect to overall factors, the following factors are ranked in the ascending order. In overall, the top most factor impacted due to technological advancement in human resource function was 'time-management'. This was followed by 'efficiency of work', 'speed/pace of work', 'day to day routine operations', 'standardization', 'effectiveness of work', 'managing change', 'work environment', 'quality improvement', 'work environment', 'cost savings', 'standardization', 'productivity', 'strategic business partner' and lastly 'work life balance'.

In the same manner the ranking was done for the male and female based on the mean scores of each factors. (*Refer Table 4a*). The t-test between genders was carried out to determine the significant difference among the male and female respondents. The t-test among gender shows no significant difference among any of the factors affected due to technological advancement in HR function. (*Refer Table 4c*).

Table 4b indicates ranking based on various scales of industries i.e. medium and large scale industries. The t-test between scales of industries was carried out to determine the significant difference among medium and large-scale industries respondents. The t-test among industries shows significant difference between most of the factors such as 'day to day routine operations', 'effectiveness of work', 'efficiency of work', 'productivity', 'quality improvement', 'standardization', 'work-life balance' and 'strategic business partner'. Factors which did not had significant difference were 'time management', 'speed/pace of work', 'cost savings', 'work environment' and 'managing change'. (Refer Table 4d). This signifies that depending on the scale of the industry importance of factors differs. For example information technology is used extensively in day to day routine activities in large scale industries therefore its ranked 1st, however for medium scale industries its not used extensively so its ranked 7th among the various factors affected due to technological advancement.

#### **LIMITATIONS**

Firstly, the sample size taken for this study was only 110 respondents which restricts us from making accurate decisions about the study. Secondly, the research was confined to Mumbai and its suburbs and hence the opinions of the respondents may differ from the rest of the professionals residing throughout the country. Hence, we cannot definitely conclude that the conclusions drawn would be similar when the data is collected from other parts of the country.

#### RECOMMENDATIONS AND CONCLUSION

The study depicts the importance of information technology in human resource functions and specifies the various areas which affected positively due to technology advancement. It also specifies the various factors which benefited due to technology advancement in human resource function such as productivity, quality improvement, time management, work life balance, managing change, cost savings, effectiveness and efficiency of work and so on.

There are a number of success stories of human resource management of organizations having variety of natures. This includes institutions in public as well as private sectors. In public sector most of the management including Human Resources are a close system by various rules of government. Therefore, operational flexibility, innovations, diversion from established management norms, financial liberty and other aspects are restricted to certain extent. Thus, to establish a benchmark for establishing success story is different in public sector as compared to similar aspects of private sectors who enjoy almost full operational flexibility of management, innovation, financial freedom and so on with in very broad governance rules. Therefore, they have better chance to create a model of success to be followed by others. In both the above systems the educational institutions have their own distinct limitations particularly the organizations of imparting technical programmer, as in addition to physical infrastructure common to other type of courses they require an excellent laboratories and qualified technical manpower for effective delivery systems. Even in a constraint conditions some of the educational organizations have established benchmark globally. In case of the technical institutions India has played a major role since ages. The difference lies in the freedom, availability of technical services and linked issues

When a business expands its operation into different countries, the impact of globalization on human resource development and management is significant. The need for companies arises to consider a diverse range of practical adjustments to be able to hire, train, retain and support a workforce that's often spread throughout several countries, which often have varying cultural identities. Human Resources departments must adapt their thinking and practices in order to include cultural differences, foreign regulations and technological developments.

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## **ANNEXURES**

**Table 1:** Reliability Statistics

Reliability Statistics								
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items						
.936	.939	13						

*Table 2:* Ranking of use of automation in various HR Areas (Gender-wise)

AUTOMATION IN HR AREAS										
HR Areas	Male	e n=76	Fema	le n=34	Overa	$\mathbf{ll} \; \mathbf{n} = 110$				
nk Areas	%	Ranking	%	Ranking	%	Ranking				
Recruitment and On-										
boarding	25.45	5	18.18	4	43.64	5				
Compensation and Benefits	27.27	4	27.27	1	54.55	4				
Training and Development	45.45	2	16.36	5	61.82	3				
Performance Management	56.36	1	23.64	2	80.00	1				
Communication	47.27	3	23.64	2	70.91	2				

*Table 3:* Ranking of use of automation in various HR Areas (Industry-wise)

AUTOMATION IN HR AREAS										
HR Areas		m-scale =48	Large scale n=62		Overall n = 110					
	%	Ranking	%	Ranking	%	Ranking				
Recruitment and On-										
boarding	10.91	5	32.73	5	43.64	5				
Compensation and Benefits	16.36	4	38.18	2	54.55	4				
Training and Development	25.45	3	36.36	3	61.82	3				
Performance Management	30.91	2	49.09	1	80.00	1				
Communication	34.55	1	36.36	3	70.91	2				

Table 4a: Ranking of Factors (Gender-wise)

IMPACT ON VARIOUS FACTORS										
Factors	Male	e n=76	Fema	le n=34	Overall n = 110					
Factors	Mean	Ranking	Mean	Ranking	Mean	Ranking				
Day to Day routine										
operations	4.34	4	4.35	2	4.35	4				
Effectiveness of work	4.26	7	4.29	4	4.27	6				
Time management	4.55	1	4.29	5	4.47	1				
Efficiency of work	4.47	2	4.41	1	4.45	2				
Speed / Pace of work	4.42	3	4.24	6	4.36	3				
Productivity	3.95	11	4.06	10	3.98	11				
Cost savings	4.11	9	4.18	8	4.13	9				
Quality improvement	4.32	5	4.24	7	4.29	5				
Standardization	4.03	10	4.35	3	4.13	10				
Work Life Balance	3.89	12	3.71	13	3.84	13				
Work Environment	4.21	8	4.06	11	4.16	8				
Strategic Business Partner	3.89	13	4.12	9	3.96	12				
Managing Change	4.29	6	4.06	12	4.22	7				

<u>Table 4b: Ranking of Factors (Industry-wise)</u>

IMPACT ON VARIOUS FACTORS									
	Mediu	ım-scale							
Factors	n:	=48	Large s	cale n=62	Overa	Overall $n = 110$			
	Mean	Ranking	Mean	Ranking	Mean	Ranking			
Day to Day routine									
operations	4.00	7	4.61	1	4.35	4			
Effectiveness of work	4.04	6	4.45	4	4.27	6			
Time management	4.42	1	4.52	3	4.47	1			
Efficiency of work	4.29	2	4.58	2	4.45	2			
Speed / Pace of work	4.29	3	4.42	6	4.36	3			
Productivity	3.67	12	4.23	10	3.98	11			
Cost savings	4.00	8	4.23	11	4.13	9			
Quality improvement	4.08	5	4.45	5	4.29	5			
Standardization	3.88	10	4.32	7	4.13	10			
Work Life Balance	3.54	13	4.06	13	3.84	13			
Work Environment	4.00	9	4.29	8	4.16	8			
Strategic Business Partner	3.75	11	4.13	12	3.96	12			
Managing Change	4.13	4	4.29	9	4.22	7			

Table 4c: Independent Samples test of male and female respondents for Factors

		Equa	Test for lity of ances			t-test	for Equality of	Means		
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Interva	nfidence l of the rence
									Lower	Upper
Day to Day	Equal variances assumed	2.857	0.094	-0.052	108	0.958	-0.011	0.207	-0.421	0.4
routine operations	Equal variances not assumed			-0.062	96.777	0.951	-0.011	0.174	-0.357	0.335
Effectivene	Equal variances assumed	1.015	0.316	-0.205	108	0.838	-0.031	0.151	-0.33	0.268
ss of work	Equal variances not assumed			-0.201	60.431	0.842	-0.031	0.154	-0.339	0.277
Time manageme	Equal variances assumed	0.309	0.58	1.605	108	0.111	0.259	0.161	-0.061	0.578
nt	Equal variances not assumed			1.543	58.1	0.128	0.259	0.168	-0.077	0.594
Efficiency	Equal variances assumed	2.343	0.129	0.42	108	0.675	0.062	0.147	-0.23	0.354
of work	Equal variances not assumed			0.398	56.384	0.692	0.062	0.155	-0.249	0.373
Speed /	Equal variances assumed	7.202	0.008	1.164	108	0.247	0.186	0.16	-0.131	0.502
Pace of work	Equal variances not assumed			1.024	48.487	0.311	0.186	0.181	-0.179	0.55
Productivit	Equal variances assumed	0.373	0.543	-0.673	108	0.503	-0.111	0.166	-0.44	0.217
У	Equal variances not assumed			-0.667	62.397	0.507	-0.111	0.167	-0.445	0.222
Cost	Equal variances assumed	1.498	0.224	-0.448	108	0.655	-0.071	0.159	-0.386	0.244
savings	Equal variances not assumed			-0.497	82.389	0.62	-0.071	0.143	-0.356	0.214
Quality improveme	Equal variances assumed	3.103	0.081	0.513	108	0.609	0.08	0.157	-0.231	0.392
nt	Equal variances not assumed			0.554	77.131	0.581	0.08	0.145	-0.209	0.37
Standardiz	Equal variances assumed	0.434	0.511	-1.631	108	0.106	-0.327	0.2	-0.724	0.07
ation	Equal variances not assumed			-1.826	84.176	0.071	-0.327	0.179	-0.682	0.029
Work Life	Equal variances assumed	0.442	0.507	0.89	108	0.375	0.189	0.212	-0.232	0.609
Balance	Equal variances not assumed			0.988	82.39	0.326	0.189	0.191	-0.191	0.569
Work Environme	Equal variances assumed	1.638	0.203	0.727	108	0.469	0.152	0.209	-0.262	0.565
nt	Equal variances not assumed			0.779	75.407	0.438	0.152	0.195	-0.236	0.54
Strategic Business	Equal variances assumed	0.251	0.618	-1.179	108	0.241	-0.223	0.189	-0.598	0.152
Partner	Equal variances not assumed			-1.289	79.352	0.201	-0.223	0.173	-0.567	0.121
Managing	Equal variances assumed	0.886	0.349	1.32	108	0.19	0.231	0.175	-0.116	0.577
Change	Equal variances not assumed			1.348	66.919	0.182	0.231	0.171	-0.111	0.572

Table 4d: Independent Samples test of medium and large scale industry respondents for Factors

		Equa	Test for lity of ances			t-te	est for Equality	of Means		
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Interv	onfidence al of the erence
									Lower	Upper
Day to Day	Equal variances assumed	10.877	0.001	-3.335	108	0.001	-0.613	0.184	-0.977	-0.249
routine operatio ns	Equal variances not assumed			-3.076	63.689	0.003	-0.613	0.199	-1.011	-0.215
Effective ness of	Equal variances assumed	0.008	0.929	-3.036	108	0.003	-0.41	0.135	-0.678	-0.142
work	Equal variances not assumed			-2.941	86.511	0.004	-0.41	0.139	-0.687	-0.133
Time manage	Equal variances assumed	2.728	0.101	-0.656	108	0.513	-0.099	0.152	-0.4	0.201
ment	Equal variances not assumed			-0.64	90.248	0.524	-0.099	0.155	-0.408	0.209
Efficienc	Equal variances assumed	2.339	0.129	-2.145	108	0.034	-0.289	0.135	-0.556	-0.022
y of work	Equal variances not assumed			-2.076	86.176	0.041	-0.289	0.139	-0.566	-0.012
Speed / Pace of	Equal variances assumed	0.946	0.333	-0.856	108	0.394	-0.128	0.149	-0.423	0.168
work	Equal variances not assumed			-0.85	98.595	0.397	-0.128	0.15	-0.426	0.17
Producti	Equal variances assumed	1.642	0.203	-3.854	108	0	-0.559	0.145	-0.847	-0.272
vity	Equal variances not assumed			-3.792	94.186	0	-0.559	0.147	-0.852	-0.266
Cost	Equal variances assumed	3.137	0.079	-1.54	108	0.127	-0.226	0.147	-0.516	0.065
savings	Equal variances not assumed			-1.465	77.537	0.147	-0.226	0.154	-0.533	0.081
Quality improve	Equal variances assumed	11.726	0.001	-2.591	108	0.011	-0.368	0.142	-0.65	-0.087
ment	Equal variances not assumed			-2.444	73.541	0.017	-0.368	0.151	-0.669	-0.068
Standard	Equal variances assumed	2.095	0.151	-2.434	108	0.017	-0.448	0.184	-0.812	-0.083
ization	Equal variances not assumed			-2.324	79.471	0.023	-0.448	0.193	-0.831	-0.064
Work Life	Equal variances assumed	15.3	0	-2.724	108	0.008	-0.523	0.192	-0.903	-0.142
Balance	Equal variances not assumed			-2.572	73.988	0.012	-0.523	0.203	-0.928	-0.118
Work Environ	Equal variances assumed	22.844	0	-1.505	108	0.135	-0.29	0.193	-0.673	0.092
ment	Equal variances not assumed			-1.399	66.957	0.166	-0.29	0.208	-0.705	0.124
Strategic Business	Equal variances assumed	7.479	0.007	-2.184	108	0.031	-0.379	0.174	-0.723	-0.035
Partner	Equal variances not assumed			-2.072	76.231	0.042	-0.379	0.183	-0.743	-0.015
Managin	Equal variances assumed	2.17	0.144	-1.012	108	0.314	-0.165	0.163	-0.489	0.159
g Change	Equal variances not assumed			-0.988	90.549	0.326	-0.165	0.167	-0.498	0.167

## **Fundamental Analysis of Portfolio Management Services**

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#### **ABSTRACT**

Portfolio Management Service is an investment product, mainly oriented towards the stock market and is a tailor-made professional service offered to cater the investments objective of different investor classes. The Investment solutions provided by PMS cater to a niche segment of clients. The clients can be Individuals or Institutions entities with high net worth. The study was conducted to understand in what manner and on what grounds the scripts are selected to be a part of a product for which investor is ready to hold Rs.25 lakhs or more on stake. The study begins with selection of potential Sectors and the top performing scripts from those particular sectors. A total of 25 scripts were nominated from 5 sectors having 5 scripts each. The best scripts are further creamed off by use of the touchstones namely; incremental return on capital employed and net profit margin of the company. Following the narrowing down, there remain 8 scripts from various sectors which decisively form the Portfolio of the PMS solution. The study is taken forward through Fundamental analysis of the finally elected companies by means of evaluating and interpreting the financial ratios, scilicet; investors ratios, liquidity ratios, efficiency ratios. To understand the value of the business, the enterprise value with respect to the Capital Employed of the enterprise has been looked over.

**Key Words:** Portfolio Management Services (PMS), Return on Capital Employed (ROCE), Net Profit Margin, Liquidity, Price to Earnings Ratio (P/E ratio).

#### INTRODUCTION

## **Fundamental Analysis**

When it comes to analysing scripts in the stock market there are two predominant methods to do so:

- 1) Fundamental Analysis
- 2) Technical Analysis

Fundamental analysis evaluates the actual business operations to determine the financial health of the company, project future growth prospects and determine current and future Valuation. Fundamental analysts maintain that market may misprice securities in the short run but in the long run, prices would merge with the securities' fair value or intrinsic value. The paper uses fundamental analysis technique to estimate the quality of the business as there is a long-term investment horizon.

Fundamental analysis considers both qualitative and quantitative dimensions of a business. While financials will reveal history of the business and the financial readiness to grow in the future, evaluating factors such as the economic conditions favourable to the business, the ability of the management to identify and exploit opportunities, the operating efficiencies that the business possesses and the risks that may affect the plans and its ability to meet these contingencies. Fundamental analysis includes following:

1. Economic analysis

2. Industry analysis

3. Company analysis

## **Portfolio Management Services**

## Meaning of portfolio management services (PMS)

Portfolio Management Services (PMS), service offered by the Portfolio Manager, is an investment portfolio in stocks, fixed income, debt, cash, structured products and other individual securities, managed by a professional money manager that can potentially be tailored to meet specific investment objectives. When you invest in PMS, you own individual securities unlike a mutual fund investor, who owns units of the fund. You have the freedom and flexibility to tailor your portfolio to address personal preferences and financial goals. Although portfolio managers may oversee hundreds of portfolios, your account may be unique.

## Reasons to invest in PMS (advantages)

• Professional Management:

• Continuous Monitoring

Risk Control

- Hassle Free Operation
- Transparency
- Customised Advice

## **Example of PMS product**

Motilal Oswal Securities Limited (MOSL) Bouquet of PMS Offerings

	Value	IOP V2	IEP	NTDOP	D.A.W. N	IOP
Amc	Motilal Oswal AMC	Motilal Oswal AMC	ASK Investment managers	Motilal Oswal AMC	Invesco Asset Management	Motilal Oswal AMC
Fund manager	Manish Sonthalia Shrey Loonker	Manish Sonthalia Mythili Balakrishnan	Prateek Agarwal Sumeet Jain	Manish Sonthalia Kunal Jadwani	Amit Ganatra Chetan Shah	Manish Sonthalia Mythili Balakrishnan
Aum (c r.) Approx.	2,740	160	5,633	7,474	314	4,651
No. Of stocks	19	20	21	24	25	22
Market cap style	Large cap	Mid and small cap	Multi Cap	Multi Cap	Multi Cap	Mid and Small cap
			69L: 31 M	57L: 43M	55L: 39M	
Risk- return profile	Medium	High	Medium to High	Medium to High	Medium to High	High

Data as on 28<sup>TH</sup> February 2018

## LITERATURE REVIEW

(Motilal Oswal Securities Ltd., 2018) The quarterly update booklet issued by MOSL contained complete information about the 6 PMS MOSL is offering. The data of the top performing scripts in each of the Products, their return and other details are listed down, providing the justifications to invest in those particular scripts. It also has detailed explanation for the scripts of each scheme individually which are giving excellent returns, so the investor can make an informed decision. Significant ratios such as Return on Equity and Price-Earing ratio along with the PAT Growth for all, previous Current and Expected year are mentioned for top 5 scripts of every PMS.

(Zvi Bodie, 2015) explains the meaning and importance of fundamental analysis, and it that fundamental analysis shows the earning capacity of the prospect. Examining a firm must start from a broader economic environment, examining the state of aggregate economy. There are two aspects in analysis, macroeconomic and industry analysis. While analysis must consider global economy, the domestic macroeconomy, demand and supply shocks and federal government policy. Later analyse the business cycle followed by industry analysis

(NISM Series, 2018) states all the ratios and their interpretation for fundamental analysis of the organisation, they are as follows

## Ratios used for fundamental analysis

Return on capital employed (ROCE)

Return on capital employed (ROCE) is a financial ratio that measures a company's profitability and the efficiency with which its capital is employed. ROCE is calculated as:

ROCE = Revenue from operations / Capital Employed

ROCE is -a useful metric for comparing profitability across companies based on the amount of capital they use. There are two metrics required to calculate the Return on Capital Employed – operating profits and capital employed

Capital employed is the total amount of capital that a company has utilized in order to generate profits. It is the sum of shareholders' equity and debt liabilities. Also, it can be simplified as total assets minus current liabilities.

## Net profit margin

Profitability ratios define how profitable the operations of the company are on per rupee of sales basis. It is evident that if the industry is very competitive and there are pricing pressures on the business, profitability will suffer. The profitability of a company can be evaluated at each level of P/L statement. The two main parameters of profitability are EBITDA Margin and Net Profit Margin (NPM) or Profit After Tax margin (PAT margin).

Net Profit Margin: Shareholders of business get their dues only at the end, i.e. after paying all stakeholders, including the government.

PAT Margin = PAT/ Total Revenues

Liquidity ratios

Current Ratio = Current Assets / Current Liabilities

Quick Ratio = (Current Assets – Inventories) / current liabilities

Efficiency ratios

Accounts Receivable Turnover = Revenue / Average Accounts Receivable

Account receivable days= 365/ Receivable T/o

Accounts Payable Turnover = COGS / Average Accounts Payable

Accounts Payable days= 365/ payables T/o

Inventory Turnover = COGS/ Average Inventory

Inventory days =365/ inventory T/o

Operating Cycle = Inventory Days + Receivables Days- Payables Days

The less the operating days the better it is for the business.

Investors ratio

Earnings Per Share (EPS)

Price to Earnings Ratio = Current price of stock/ Earnings Per Share

Earnings Yield = Earnings Per Share / Current price of stock

Price to Dividend = Current price of Stock/ Dividend per share

Dividend Yield = Dividend per share / Current price of stock

Dividend Pay-out Ratio= Dividend Per Share/ Earnings Per Share

#### Valuation

Return on capital employed based (ROCE) Valuation

Return on Capital Employed (ROCE) based Valuation – Enterprise Value (EV) to Capital Employed Ratio

Enterprise value includes the value of equity and debt of a firm and is defined as:

 $EV = Value ext{ of Equity} + Value ext{ of Debt} - cash ext{ and cash equivalents}$ 

EV to Capital Employed ratio is defined as:

EV to Capital Employed ratio = Enterprise Value / Capital Employed

(M Y khan, 2014) says that with the help of ratio analysis conclusions can draw regarding the liquidity position, long term solvency, operating efficiency of a firm is satisfactory. A firm can be said to have the ability to meet its short-term liabilities if it has sufficient liquid funds to pay its interests on short term funds usually within a year and also the principal amount. Ratio analysis is equally useful to assess long term viability of the firm. The solvency can be

measured by leverage, profitability and operating efficiency. The degree of efficiency in the utilization of resources and assets. The ultimate analysis depends on the revenue or sales generated by utilization of the assets. The management is most importantly concerned about the profitability of the firm, how they are to meet firms' short term and long-term obligations.

(Abdel-Jalil, 2009)This paper aims to improve our understanding to the changes in stock prices in Amman Bourse, by examining the determinants of three Valuation multiples: price to sales price to book value of equity, and price to earnings (PE) ratios. Net profit margin (NPM) is a measure of the sales' effect on stock price. The evolution of (PBVE) ratio is mainly measured by return on equity (ROE). Dividends pay-out ratio is an important measure of (PE) ratio. In addition, these multiples facilitate the analysis and the comparison between companies in the same industry. Consistent with the economic theory this paper found that: 1. Price to sales ratio is significantly positively related to net profit margin. 2. Price to book value of equity ratio is significantly negatively related to return on equity ratio. 3. Price to earnings ratio is significantly positively related to dividends pay-out ratio. In other words, stock price changes in proportion to changes in net profit margin, and dividend pay-out ratios. Future research can take into account the effect of systematic risk on the Valuation Multiples.

(Pattabiraman, 2013) ROCE is an important shareholder value metric, yet most annual reports of companies do not even talk about it. It has been observed that organisations which have a superior ROCE compared to their industry, have a relentless focus on driving their organisations towards achieving it. Such organisations link all their strategic and operational initiatives, including performance metrics across functions and levels, to the key ROCE value drivers such as fixed asset productivity, working capital turns, and operating margins. Targets are set against these during the planning and budgeting process, and initiatives are prioritized based on how important they are in preserving or enhancing ROCE. One company with a good ROCE discipline is Bajaj Auto, which has put its small car project on hold, despite having invested time and money in this effort, because the project did not meet its ROCE requirements.

(Tulsian, 2014) The word profitability is composed of two words, namely, profit and ability. The term profit has been explained above and the term ability indicates the power of a business entity to earn profits. The ability of a concern also denotes its earning power or operating performance. Profitability is a relative concept whereas profit is an absolute connotation. Despite being closely related to and mutually interdependent, profit and profitability are two different concepts. As an absolute term, profit has no relevance to compare the efficiency of a business organization. A very high profit does not always indicate sound organizational efficiency and low profitability is not always a sign of organizational sickness. Therefore, it can be said that profit is not the prime variable on the basis of which the operational efficiency and financial efficiency of an organization can be compared. To measure the productivity of capital employed and to measure operational efficiency, profitability analysis is considered as one of the best techniques

## **OBJECTIVES**

- 1. To create a new PMS keeping in view of the criterion and selecting the scripts qualifying the specified parameter from the selected sectors.
- 2. To perform fundamental analysis through various performance and efficiency indicating ratios of the scripts selected for the final PMS.
- 3. To analyse the Risk Profile of the PMS through the Price-Earnings Ratio.

#### RESEARCH DATA

The following is the rationale for sectorial selection for PMS:

**Information technology industry:** Indian equity benchmarks rebounded sharply from losses in the previous session led by strong gains in IT companies and private sector lenders. The global digital transformation market size is expected to rise at a CAGR of 18.56 per cent from US\$ 1.2 trillion in 2017 to US\$ 2 trillion in 2020.India's IT industry is increasingly focusing on digital opportunities as digital is poised to be a major segment in the next few years. It is also currently the fastest growing segment, growing over 30 per cent annually.

The IT sector has been one of the best performers in the past year from 24<sup>th</sup> May 2017 to 24<sup>th</sup> May 2018. It has shown major advances establishing an advance-decline ratio of 0.47. The main contributor is Computer Software having a market capitalization of 1,453,483 cr. Showing advances up to 20.51%.

Consumer non-durables industry: The Personal care sector and Finance investments are the best performers under consumer non-durables. The personal care sector holding a market Capital of 666,385 cr. The personal care has been on an advance of 8,12%. The personal care is that sector that consists of products that are more of a necessity in daily use such as Soaps, Shampoos, home cleaning products.

The FMCG sector has steadily grown as it was US\$31.6bn (Rs20,63,95,40,00,000) in 2011 and went up to US\$49bn (Rs32,00,43,50,00,000) in 2016 and is still rising at a constant rate. It is expected to rise even higher at a CAGR (compound annual growth rate) of 20.6% and will reach US\$103.7bn (Rs67,73,16,55,00,000) by 2020.

**Automotive industry:** The automotive industry has a total market capital of 1,137,35 cr. Multiple subsectors are considered while building the share of Automotive sector considering the cars and two-wheeler vehicles etc along with the automotive ancillaries.

The Indian auto industry is one of the largest in the world. The industry accounts for 7.1 per cent of the country's Gross Domestic Product (GDP). The Two Wheelers segment with 80 per cent market share is the leader of the Indian the overall Passenger Vehicle (PV) segment has 14 per cent market share

India is also a prominent auto exporter and has strong export growth expectations for the near future. Overall automobile exports grew 15.81 per cent year-on-year between April-February 2017-18. As a leading consumer of automotive products, India has witnessed impressive

growth over the past decade. It is due to this growing demand that the country has become the largest passenger vehicle market for Suzuki Motor, and Hero MotoCorp continues to maintain its position as the world's largest two-wheeler manufacturer for 17 consecutive years.

**Banking and finance industry:** The market capital of banking and finance sector is 3,098,749cr out of which private banks have 1,382,772cr of market capital and has advanced by 6.03% is the only sector that has advances among all the banking and finance sectors. According to Indian experts, the revival of our economy is not possible without the contribution of the banking sector. Keeping this in mind, investors have extensively invested in the banking sector in the last 5 years. Banking stocks are the lifeline of the Indian stock exchanges. This can't get more evident than when the announcement, made in October 2017, to invest Rs2 lakh crore in the banking sector drove the BSE Sensex to climb the magical 33,000-mark. NIFTY50 has nine bank stocks.

**Pharmaceuticals industry:** The Pharmaceutical industry has a total Market Capital of 683,819cr, its performance has declined by 11.24%, which may not seem to be a good trend. Although top companies such as Sun Pharma and Cipla have reduced from what they used to be in the year 2015 where the average share price of 2015 was about Rs.952 which has come down to 525.4 as of 2018.

Name of Company	Market Capital	Sector	Average Market Price	Indust ry P/E	Industry Market Cap	
TCS	684721.53	IT	2958.45			
Infosys	265480.65	IT	1040.8			
Tech Mahindra	68836.28	IT	543.3	21.66	14,88,225	
Wipro	128651.7	IT	293.425			
HCL technologies	127139.26	IT	965.9			
HUL	337352.63	Consumer Non-durables	1320.625			
Dabur	65546.18	Consumer Non-durables	26	1		
Godrej	75525.38	Consumer Non-durables	1009.125	63.42	6,90,232	
Colgate Palmolive	33807.81	Consumer Non-durables	1130.35			
Marico	40720.32	Consumer Non-durables	315.925			
Maruti Suzuki	254896.67	Automotive	8409.5	30.85		
Eicher Motors	80594.66	Automotive	29741.98	36.22		
Exide Ind	21114	Automotive	231.625	30.4	11,29,085	
Hero Moto crop	69563.49	Automotive	3776.88	21.16		
Mahindra and Mahindra	106578.9	Automotive	750.23	31.24		
HDFC BANK	512370.31	Banking and Finance	1813.75			
Kotak Mahindra	241375.92	Banking and Finance	1117.45			
ICICI	190555.2	Banking and Finance	310.83	31.3	30,26,893	
AXIS Bank	134,726.72	Banking and Finance	520.18			
RBL Bank	23,297.69	Banking and Finance	514			
Sun pharma	111664.5	Pharmaceuticals	525.4	30.15	5 6,70,384	
Cipla	43094	Pharmaceuticals	571	30.13	0,70,304	

Cadila Health	36214.89	Pharmaceuticals	449.83	
Lupin	33681.68	Pharmaceuticals	1000	
Dr. Reddys Lab	32854.14	Pharmaceuticals	2338	

## RESEARCH METHODOLOGY

Secondary Data has been used to collect data for the research. The Data acquired from Money Control for the calculations of prior two ratios. The sectors are chosen based on their share in the market capital and the performance for the past year to 24<sup>rd</sup> of May 2018. 25 scrips are considered for, of 5 sectors having 5 companies each. The Share advancements and decline details have been taken from the data Available on money control. The sector selections have been supported by other details gathered from News reports and expert articles from various authentic sources.

Two Major Craterisation's are Considered:

1. Incremental Percentage change in Return on Capital Employed (ROCE). A Range of minimum 10-20% incremental ROCE has been considered in any of the past 3 years for the Script to Qualify for the PMS.

#### AND/OR

2. Net Profit Margin of the Company. i.e. The Net Profit Percentage of the Total Revenue. Scripts having a Net Profit Margin minimum 18% and above will be considered in the PMS.

Later, the scripts qualifying the above-mentioned criterions a ratio analysis has been done for those scripts in order to estimate the performance and financial position of the script.

These final scripts are added as a part of the PMS Portfolio.

While calculating ratios that involve the use of Market Price Per Share (MPS) an average market price as on 24<sup>th</sup> May 2018 is considered and other values such as Earnings per share (EPS) and Dividend per share (DPS) are considered at historical value as on their Income statement for the year 2016-17.

## **DATA ANALYSIS**

## **Selection of scripts**

The 25 scripts, 5 stocks of 5 sectors each have been analysed on the basis of the two craterisations namely incremental ROCE and Net profit margin. The highlighted scripts are the ones that qualify the required conditions to be included in the PMS portfolio.

	NAME	RATIO	2017	2016	2015	2014	2013
	Tata	ROCE	123.03%	135.57%	167.47%	149.51%	145.27%
	Consultancy	Percentage Change	-9.25%	-19.05%	12.01%	2.92%	
	Service	Net Profit Margin	24.32%	25.75%	24.67%	27.25%	25.24%
		ROCE	87.06%	88.29%	98.34%	104.44%	170.94%
In	Infosys	Percentage Change	-1.39%	-10.22%	-5.84%	-38.90%	170.7170
form	illosys	Net Profit Margin	22.16%	22.27%	24.02%	21.73%	24.49%
natio		ROCE	121.68%	137.04%	149.52%	154.90%	123.01%
n T	Tech	Percentage Change	-11.21%	-8.35%	-3.47%	25.92%	
echr	Mahindra	of ROCE					
lolo		Net Profit Margin	13.15%	15.36%	11.77%	15.09%	10.87%
gy		ROCE	93.37%	104.97%	114.33%	125.75%	135.17%
Information Technology Sector	Wipro	Percentage change of ROCE	-11.05%	-8.19%	-9.08%	-6.97%	
		Net Profit Margin	16.79%	17.07%	18.74%	18.30%	16.35%
		ROCE	73.02%	60.86%	86.13%	100.16%	110.06%
	HCL Technologies	Percentage Change of ROCE	19.98%	-29.34%	-14.00%	-9.00%	
	C	Net Profit Margin	33.90%	32.76%	34.58%	34.88%	28.73%
		-					
	NAME	RATIO	2017	2016	2015	2014	2013
	TURNE	ROCE	33.81%	30.04%	30.38%	27.92%	30.06%
	Sun Pharma	Percentage change	12.57%	-1.12%	8.79%	-7.11%	30.0070
	Sun I narma	Net Profit Margin	-0.43%	-13.34%	-17.91%	-94.08%	19.36%
	Cipla	ROCE	84.09%	98.64%	87.24%	89.27%	88.88%
Ρ.		percentage change	-14.75%	13.06%	-2.27%	0.44%	
hari		Net Profit Margin	8.88%	12.07%	11.66%	14.80%	18.37%
nace	G 171	ROCE	40.22%	102.97%	99.01%	86.47%	94.51%
eutic	Candila Health	Percentage change	-60.94%	3.99%	14.51%	-8.51%	
cals	пеанн	Net Profit Margin	17.36%	27.58%	23.24%	20.77%	13.37%
Pharmaceutical Sector		ROCE	82.62%	91.36%	104.33%	121.83%	137.27%
or	Lupin	Percentage Change in ROCE	-9.57%	-12.43%	-14.36%	-11.25%	
		Net Profit Margin	24.88%	25.23%	24.58%	26.00%	17.70%
		ROCE	79.74%	80.00%	85.00%	93.59%	106.54%
	Dr. Reddy	percentage change	-0.33%	-5.88%	-9.18%	-12.15%	
		Net Profit Margin	14.24%	13.27%	16.78%	19.87%	15.00%
	NAME	RATIO	2017	2016	2015	2014	2013
	HDEC Pouls	ROCE (deposits considered as cap Emp)	12.68%	12.99%	12.75%	13.35%	14.15%
Banking Sector	HDFC Bank	percentage change in ROCE	-2.39%	1.89%	-4.54%	-5.62%	
ing		Net Profit Margin	18%	17%	18%	17%	18%
Sec		ROCE	15.03%	16.15%	16.95%	16.45%	16.55%
tor	ICICI bank	Percentage Change	-6.93%	-4.69%	3.00%	-0.58%	
		Net Profit Margin	13.31%	14.29%	18.24%	17.97%	17.19%
	Voto1-	ROCE	13.45%	13.70%	15.69%	17.21%	18.04%
	Kotak Mahindra	Percentage Change	-1.83%	-12.69%	-8.82%	-4.57%	
	iviaiiiidi d	Net Profit Margin	16.11%	11.00%	15.88%	14.78%	14.79%

		ROCE	13.57%	14.07%	13.60%	13.54%	13.35%
	Axis Bank	Percentage change in ROCE	-3.54%	3.46%	0.41%	1.41%	
		Net Profit Margin	6.54%	16.33%	16.78%	16.34%	15.35%
	RBL Bank	ROCE	12.92%	13.29%	13.78%	13.90%	12.06%
		Percentage change	-2.75%	-3.60%	-0.88%	15.30%	
		Net Profit Margin	9.98%	9.04%	8.79%	5.75%	9.23%
	NAME	RATIO	2017	2016	2015	2014	2013

	NAME	RATIO	2017	2016	2015	2014	2013
		ROCE	131.97%	192.87%	223.57%	245.33%	260.53%
	Dabur	Percentage change	-31.57%	-13.73%	-8.87%	-5.83%	
		Net Profit Margin	17.94%	15.80%	13.69%	13.51%	13.32%
Pers		ROCE	103.39%	126.88%	132.28%	135.79%	119.65%
Personal	Godrej	Percentage Change	-18.51%	-4.09%	-2.58%	13.49%	
l Care		Net Profit Margin	17.62%	15.24%	14.58%	13.71%	14.07%
	II' 1 .	ROCE	422.44%	635.94%	635.01%	637.59%	895.48%
Sector	Hindustan Unilever	Percentage Change	-33.57%	0.15%	-0.40%	-28.80%	
	Officever	Net Profit Margin	14.08%	12.76%	14.01%	13.80%	15.44%
(FMCG)	Colonto	ROCE	299.81%	375.95%	476.70%	572.17%	602.24%
CG	Colgate Palmolive	percentage change	-20.25%	-21.13%	-16.69%	-4.99%	
	1 annouve	Net Profit Margin	14.36%	13.72%	13.92%	14.88%	15.46%
		ROCE	164.97%	189.63%	185.35%	164.57%	164.57%
	Marico	Percentage change	-13.00%	2.31%	12.63%	0.00%	
		Net Profit Margin	16.48%	13.66%	11.31%	14.74%	14.73%

	NAME	RATIO	2017	2016	2015	2014	2013
	TT	ROCE	268.61%	344.91%	415.55%	445.44%	445.44%
	Hero MotoCorp	percentage change	-22.12%	-17.00%	-6.71%	0.00%	
	Motocorp	Net Profit Margin	11.65%	10.80%	8.50%	8.20%	8.20%
		ROCE	180.17%	206.93%	202.08%	194.56%	217.87%
≥	Maruti Suzuki	Percentage Change	-12.94%	2.40%	3.87%	-10.70%	
Automotive		Net Profit Margin	10.44%	7.85%	7.31%	6.25%	5.39%
noti	Eicher Motor	ROCE	173.00%	278.54%	238.29%	200.71%	161.97%
		Percentage Change	-37.89%	16.89%	18.72%	23.91%	
Sector		Net Profit Margin	21.47%	19.32%	17.76%	15.63%	13.22%
or		ROCE	147.63%	146.48%	163.15%	154.41%	171.07%
	Excide Ind	Percentage Change	0.79%	-10.21%	5.66%	-9.74%	
		Net Profit Margin	8.97%	9.04%	7.90%	8.12%	8.50%
	Mahindra and	ROCE	146.54%	158.97%	162.47%	179.86%	209.50%
	Mahindra and Mahindra	Percentage Change	-7.82%	-2.16%	-9.67%	-14.15%	
		Net Profit Margin	8.77%	7.59%	8.35%	9.12%	8.18%

IT Sector	Pharmaceutical Sector	Banking Sector	FMCG Sector	Automotive Sector
1.TCS	4.SunPharma	6.HDFC Bank	7.Marico Ltd	8.Eicher Motors
2.Infosys	5.Cipla			
3.HCL Tech				

Therefore, on the basis of Return on Capital Employed Percentage Change or Net Profit margin Scripts matching the required criterions are selected for the PMS and further Ratio analysis to estimate the performance of scripts. The scripts are expected to have an incremental growth rate and give good returns to the investor. Following are the Scripts selected:

Sector	Percentage of Holdings
Information technology Sector	37.50%
Pharmaceutical Sector	25.00%
Banking Sector	12.50%
FMCG Sector	12.50%
Automotive Sector	12.50%

Fundamental analysis of the final 8 scripts

#### Tata consultancy service

Tata Consultancy Services Ltd is a leading global IT services, consulting and business solutions organization. The company offers a range of IT services, outsourcing and business solutions. They also offer IT infrastructure services, business process outsourcing services, engineering and industrial services, global consulting and asset leveraged solutions. Their segments include banking, financial services and insurance; manufacturing; retail and distribution, and telecom.

## Analysis for year 2016-17:

In 2016-17 the current ratio of TCS is 6.4 which indicates the company is high on liquidity and can pay the current liabilities when they arise. The acidity test ratio is also 6.4 which means that the company doesn't at all depend upon its inventories to pay off its debts. For the year 2016-17 the dividend pay-out ratio is approximately 0.2, the company is holding most of its profits as reserves, TCS is therefore looking into further more growth opportunities.

It is observed that the dividend yield is lower at 0.008 as compared to the earnings yield of 0.04. The yield is better on earnings of the share as the dividend paid out is lower, which is also the reason for a high price to dividend ratio

In 2017 TCS also has a negative operating cycle which means the company has an excellent and debtor's collection system and minimum amount of working capital blocked into inventories, it has the highest payable days, hence having more liquidity of current operations.

As of 2016-17 the company has a higher P/E of 24.6 than the industry P/E of 21, there is a slightly higher risk, yet the company considering its growth pattern at a CAGR of 7.61% it stands to be a potential venture for investment.

The enterprise value is 8.65 times of the capital employed which highest than any other script selected for the PMS. TCS truly does deserve to stand the high EV it has. But with the ROCE of 123% the investor will only get 14.21% (123%/8.65) portion on the Return by paying 8.65 times.

#### APPENDIX 1

## **Infosys** (information technology consultancy)

Infosys is a global leader in next-generation digital services and consulting. It enables clients in 45 countries to navigate their digital transformation. With over three decades of experience

in managing the systems and workings of global enterprises, Infosys expertly steer our clients through their digital journey. The company does it by enabling the enterprise with an AI-powered core that helps prioritize the execution of change. It also empowers the business with agile digital at scale to deliver unprecedented levels of performance and customer delight. Our always-on learning agenda drives their continuous improvement through building and transferring digital skills, expertise, and ideas from our innovation ecosystem.

Analysis for the year 2016-17:

In the year 2016-17 the EPS of Infosys has been Rs.60 which is a considerably good amount. It has made it worth the price of the share, hence having a P/E ratio of 17 while the industry P/E is 21. This script balances out the risk of the investor as far as the IT sector is concerned as lower P/E indicates lower risk,

The earning yield is 0.04 whereas the P/E is 17, a close watch is required whether the investor will be getting returns worth his investments. The company must grow and thus induce its share prices to grow to provide higher returns for the investors.

In the year 2016-17 the retention of earnings has increased leaving the Dividend pay-out ratio to be 0.45. It indicates fair change the company has future growth prospects. The company is expected to further grow at a CAGR of 7.2%

The company has an efficient operating cycle of 36 days as it doesn't have any specified inventories, however the payment days are slightly higher than that of the receipt days.

Considering a conservative approach in 2016-17 the cash ratio of the company is 1.62 which indicates high liquidity of the company, mere its current cash and equivalents can pay off its current liabilities. It improves the credibility of the company and would be easy to raise short term funding by the company if required.

Infosys having an excellent Enterprise value with respect to capital employed of 3.61 and with the ROCE being 87% the investor would get 24% of the returns from the enterprise value.

#### APPENDIX 2

## **HCL** technology

HCL Technologies is a next-generation global technology company that helps enterprises reimagine their businesses for the digital age. Our technology products, services and engineering are built on four decades of innovation, with a world-renowned management philosophy, a strong culture of invention and risk-taking, and a relentless focus on customer relationships.

Analysis for the year 2016-17:

In the year 2016-17 the company has a Dividend Pay-out ratio of 60%, the company is distributing more earrings than it is retaining unlike the other two IT sector scripts. The

company is having an excellent return on Capital employed as it is holding back just the amount required. This script balances the Portfolio as it fulfils the demand of an investor who is interested in a fixed dividend income.

The P/E of the company is 20 which makes it moderately risky and the investor is to pay 20 times of the earnings he receives. However, the price to dividend ratio is 33 which is lesser and more economical when compared to that of the other scripts.

The company may not be looking into long term investment plans, although HCL has considerably high Liquidity with an efficient current and quick ratio of 3.6 and 3.4 respectively this indicates it has sufficient working capital to fund its short-term needs of borrowings for operations.

However, the company has high operating days of 326 days which if not handled well can hamper the current liquidity situation of the Company.

Although the company doesn't have a high CAGR the company is paying out higher number of dividends to keep the investors attracted to the company. In some way the company still is providing the investor liquidity to reinvest their annual dividends.

For HCL tech the EV value accounts to be 4.52 of the capital employed and the ROCE stands to be 73%, this means that the investor would get 16.14% from the return on capital employed.

#### APPENDIX 3

## **Sun Pharmaceutical**

Sun Pharma Laboratories Limited is a pharmaceutical company having registered office in Mumbai, Maharashtra. The Company manufactures and markets pharmaceutical products in India. It was incorporated on January 17, 1997. On March 9, 2012, it became a wholly owned subsidiary of Sun Pharmaceutical Industries Limited (SPIL).

Sun Pharmaceutical Industries Ltd is an international specialty pharma company. The Company manufactures and markets pharmaceuticals formulations as branded generics, as well as generics in India, the United States (US) and several other markets across the world.

Analysis for the year 2016-17:

In the year 2016-17 the overall performance of the Pharmaceutical sector has gone down especially Sun pharma. The CAGR has been -0.07% for the past 3 years. This script was selected due to its incremental return on Capital employed, this indicates that the company is generating returns on capital employed even if it is not creating high profits.

In the year 2016-17 the company is yielding earrings of 55% with a P/E ratio of 18.11, the script is definitely giving better yields than that of bonds and also at a lower P/E than the other scripts which makes it very economical.

The company also has an operating cycle of 145 days having the highest inventory days, this is due to the drop-in sales of the company.

In the year 2016-17 the current ratio is 0.58 the company is also likely to face a liquidity crunch if sudden current liabilities arise.

The EV value of Sun Pharma is 4.98 times of the capital employed, looking at the financial position of the company it is fairly a high price to pay. Although it is a good sign for the investors purchasing Sun pharma's scripts. it will give 25% of the ROCE.

#### APPENDIX 4

### **Cipla Pharmaceutical**

Cipla is a leading global pharmaceutical company, dedicated to high-quality, branded and generic medicines. We are trusted by healthcare professionals and patients across geographies. Over the last 8 decades, we have strengthened our leadership in India's pharmaceutical industry and fortified our promise of 'Caring for Life'.

Analysis for the year 2016-17:

In the year 2016-17 the working capital ratio of Cipla was 2.48 which indicates more liquidity in the company, however the Acidity test ratio is about 1.44 which indicates that the working capital liquidity is highly dependent on the inventories of the company.

This has in turn increased the inventory days of the company to 245 days resulting in a high operating cycle of 210 days. A lot of working capital is blocked into the inventories. This can mean that the decrease in the revenues for 2017 is due to the decrease in the sales of the company also there may be a slight decrease in production.

In the year 2016-17 the P/E ratio is 47, which reflects a higher risk but also a higher chance of growth in the company. This can also be identified by the dividend pay-out pattern of the Company which is 20.12%, meaning Cipla is retaining more earnings for future investments into new growth avenues.

In 2016-17 the Change in Cipla's reserves is 6.89% whereas the Revenues for 2016-17 have reduced by 10.43%. this is an indicator that the company is getting into a defensive strategy where it is saving more than its earrings, Cipla is trying to generate funds for future certain and uncertain events.

Never the less, though the market is volatile and uncertain it is expected that the tide will soon turn in favour of the Pharmaceutical sector.

For acquisition of Cipla the Enterprise value 3.3 times of the capital employed by the Cipla. The ROCE for 2016-17 is 84%, this means that the ROCE will be giving 25.35% of the Value.

#### **APPENDIX 5**

#### **HDFC Bank**

The Housing Development Finance Corporation Limited (HDFC) was amongst the first to receive an 'in principle' approval from the Reserve Bank of India (RBI) to set up a bank in the private sector, as part of RBI's liberalisation of the Indian Banking Industry in 1994. The

bank was incorporated in August 1994 in the name of 'HDFC Bank Limited', with its registered office in Mumbai, India. HDFC Bank commenced operations as a Scheduled Commercial Bank in January 1995.

Analysis for the year 2016-17:

In the year 2016-17 HDFC bank had the highest Net profit margin of 18%, compared to the top 5 scripts in the banking sector. In spite of the banking reforms and drifts of investors into other high yielding investment products from bank deposits.

HDFC has diversified into many other investments and returns solutions such as insurance and Mutual funds. The bank is expected to perform better into its overall business.

For the year 2016-17 the dividend pay-out ratio is 0.2 approx. the company is retaining most of its earnings which may indicate that the company has plans for further growth and expansion.

The P/E for the year 2016-17 is 32 approx. and that of the industry is 31, which means the risk involved is reasonable when compared with the sector as a whole. On the other hand, the earnings yield is 0.03 which indicates the earnings received is much lower than the prices paid for the share.

Banking is cyclical in nature and in years to come the Indian economy is expected to be at a boom, thus leading to a good performance of the banking sector.

PMS is created with a long-term growth perspective; major returns are from the increments of the share prices which expected from HDFC bank in the years to come.

HDFC would be worth the buy as here the investor is paying only 1.94 times the value of Capital employed and he would receive about 6.5% times return on that EV value.

#### APPENDIX 6

#### Marico Ltd

Marico Limited (ML), a leading Fast-Moving Consumer Goods (FMCG) player was incorporated on 13th October 1988 under the name of Marico Foods Limited. The name of the company was changed from Marico Foods Limited to Marico Industries Limited with effect from 31st October of the year 1989. During the same year 1989

Analysis for year 2016-17:

In the year 2016-17 the dividend pay-out is 53% this indicates that Marico is retaining about half of its earnings.

It is observed that the business is available at earnings yield of 2.06% at a P/E is 48 times, it is clearly an expensive script for the investor. Although it has a higher risk, the company has a CAGR for past 5 years is 9.28% and is expected to grow in the years to come.

As compared to the other FMCG giants the market cap of Marico is yet to grow further, this scope of growth holds a potential chance for the investor to generate high returns on their long-term holdings with the company.

In the year 2016-17 the working capital ratio is 2.51 however the quick ratio is 1.15, the company is highly dependent on its inventory for its credibility, considering the nature of the company is it bound to be high on its inventory. The company should start building on other current assets such as cash and equivalents so as to not face a liquidity crunch when liabilities arise unexpectedly as the cash ratio is mere 0.086.

The company has an efficient operating cycle of 81 days in spite of being high on inventory, this indicates it has a good debtors collection system and more days granted by the payables.

Here the Enterprise value that the investor would have to pay is 13.83 of the capital employed for Marico. On this rate, considering the ROCE investor will be generating around 11.93% of the return. It is totally on the value of business and perception of the investor whether or not the investment is worth the return generated from it.

#### APPENDIX 7

#### **Eicher Motor**

Eicher Motors Limited (EML) is the flagship company of the Eicher Group, which was a catalyst in the green revolution in India with the production of India's first agricultural tractor in 1959. EML is now a leading player in the Indian automotive space. Eicher Motors owns the iconic Royal Enfield motorcycle business, which leads the premium motorcycle segment in India. The oldest motorcycle brand in continuous production worldwide, Royal Enfield has witnessed a huge surge in demand in the recent past and is charting its course to be the leading player in the mid-sized motorcycle segment globally

Analysis for the year 2016-17:

In the year 2016-17 Eicher Motors has the highest EPS of Rs.572 compared to all the other scripts included in the PMS. With a CAGR of 32% Eicher Motors has been giving a remarkable performance.

For the year 2016-17 the dividend pay-out of 17.47% and most earnings are retained, denoting more growth prospects in the future which will yield more returns to the investors.

The business has operating cycle of 12 days with the least amount of receivable days, the company has great control on its cashflows as far as receipts and payments related to retail is concerned.

In the year 2016-17 the earnings yield is 1.92% whereas the P/E ratio is 51.98. It is surely an expensive script as compared to the earnings and also the dividends. The higher P/e also indicates higher risk in the business. The current ratio is 0.93, the company has more scope of improving its working capital position.

As the banking sector the automotive sector also is cyclical in nature. The growth depends largely on the growth of the economy. Indian economy is on a boom and is expected to grow over the years. Eicher motors are expected to perform extremely well in a long run.

The investor will be paying an enterprise which is 19.8 times of the capital employed. Where the return on capital employed is 173%, the investor therefore will generate 9.10 times of what he is to pay.

## RESEARCH FINDINGS AND CONCLUSIONS

- 1. There were 5 sectors selected to create a PMS product, namely: Information Technology, Banking, Pharmaceutical, FMCG (Personal care), Automotive Sector.
- 2. On the basis of the criterions and the ranges considered out of 25 only 8 scripts are selected and those form the portfolio of the PMS
- 3. Most of the 8 scripts were high on Efficiency and liquidity, and if not, they had other high-performance indicators such as higher dividend yield or Higher EPS. All the scripts in some or the other way have their own benefits contributing to the PMS, while some are generating the returns others are compensating for the risk factor.
- 4. In order to study the risk, factor the P/e ratio when compared to the industry P/e, the scripts can be divided into 3 categories:

Risk	Script
Higher Risk	TCS, Eicher Motors, Cipla
Moderate Risk	HCL Tech, HDFC Bank
Lower Risk	Infosys, Sun Pharma, Marico Ltd

5. Considering the ticket size Rs.25 lakhs as the amount invested and assuming the entire portfolio comprises of only these 8 scripts and no other component the investors PMS Portfolio will be divided into Rs.31250 invested into each script.

## RECOMMENDATIONS

- 1. If the investor/fund manager will follow this PMS for his investments one should keep track of the script's performance and share price advancements and declines constantly.
- 2. Special attention must be given to the Pharma sector scripts as the sector is extremely volatile and vulnerable to the change in healthcare policies.
- 3. The stock should never be sold at a loss, i.e. avoid selling the script at a price lower than it was initially purchased it.
- 4. The investor can explore into various other sectors such as the aviation sector, or Agri-based sectors which are expected to perform extremely well in the future.

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Annual Reports (for year 2016-17)				
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Annual Report of Infosys	Annual Report of HDFC bank			
Annual Report of HCL Tech	Annual Report of Eicher Motors			
Annual Report of Sun Pharma	Annual Report of Marico			

# **APPENDIX**

Appendix 1				
<b>Tata Consultancy Service</b>				
Ratios	Amount			
EPS	120.04			
DPS	23.93057			
BOOK VALUE	223.4			
Dividend Pay-	0.199355			
out	**********			
Dividend Yield	0.008089			
Price to Dividend	123.6264			
Earnings Yield	0.040575			
Price to Earning	24.64553			
Receivables T/o	5.19			
Receivables	70.30226			
Days	70.30220			
Payables T/o	0.3432			
Payable Days	1063.441			
Inventory T/o	117.2			
Inventory Days	3.114334			
Current Ratio	6.412391			
Quick Ratio	6.410429			
Cash Ratio	0.122979			
Operating Cycle	-990.025			
CAGR for past 3	years is 7.61%			
Valuation				
Particulars	Values/Ratios			
Enterprisevalue	6,84,440.53			
Capital	79,057.00			
Employed	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
EV/Cap mployed	8.657557585			
ROCE	123.03%			

Appendix 2					
Infosys					
Ratios	Amount				
EPS	60.15				
DPS	27.10799				
BOOK VALUE	297.27				
Dividend Payout	0.450673				
Dividend Yield	0.026045				
Price to Dividend	38.39459				
Earnings Yield	0.057792				
Price to Earning	17.30341				
Receivables T/o	5.7124				
Receivables Days	63.89609				
Payables T/o	13.55157				
Payable Days	26.93415				
Inventory T/o	NA*				
Inventory Days	NA*				
Current Ratio	4.045647				
Quick Ratio	NA*				
Cash Ratio	1.625064				
Operating Cycle	36.96194				
*Inventories not s	pecified in B/s				
Valuation					
Particulars	Values/Ratios				
Enterprise value	2,46,409.65				
Capital Employed	68,099.00				
EV / Cap Employed	3.6184034				
ROCE	87.06%				

Appendix 3				
HCL Technologies				
Ratios	Amount			
EPS	48.13			
DPS	29.22421			
BOOK VALUE	236.59			
Dividend	0.607193			
Payout	0.007173			
Dividend Yield	0.030256			
Price to Dividend	33.05136			
Earnings Yield	0.049829			
Price to Earning	20.06856			
Receivables T/o	4.543924			
Receivables Days	80.32705			
Payables T/o	0.3451			
Payable Days	1057.664			
Inventory T/o	1.482356			
Inventory Days	246.2296			
Current Ratio	3.06309			
Quick Ratio	3.047885			
Cash Ratio	1.346224			
Operating Cycle	326.2116			
CAGR for past 3	years is 3.37%			
Valuation				
Particulars	Values/Ratios			
Enterprise value	1,19,660.95			
Capital Employed	26,457.33			
EV / Cap Employed	4.522790093			
ROCE	73.02%			

Appendix 4	
Sun Pharmaceuticals	
Ratios	Amount
EPS	29
DPS	3.5
BOOK VALUE	179.77
Dividend Payout	0.12069
Dividend Yield	0.006662
Price to Dividend	150.1143

Appendix 5		
Cipla Pharmaceutical		
Ratios	Amount	
EPS	12.11	
DPS	2.437659	
BOOK VALUE	177.53	
Dividend Payout	0.201293	
Dividend Yield	0.004269	
Price to Dividend	234.2412	

Appendix 6	
HDFC Bank	
Ratios	Amounts
EPS	56.43
DPS	11
BOOK VALUE	422.24
Dividend Payout	0.194932
Dividend Yield	0.006065
Price to Dividend	164.8864

5196	
1724	
3.17	
.0355	
.0555	
7027	
.1291	
9981	
.1346	
9997	
1793	
4915	
5.041	
Operating Cycle 145.041  CAGR for past 3years is -0.07%	
es/	
os	
4.84	
5.66	
9919	

Earnings Yield	0.021208
Price to Earning	47.15111
Receivables T/o	5.566083
Receivables	65.57574
Days	
Payables T/o	3.618357
Payable Days	100.8745
Inventory T/o	1.486476
Inventory Days	245.5472
Current Ratio	2.482693
Quick Ratio	1.444478
Cash Ratio	0.022873
Operating cycle	210.2484
Valuation	
<b>Particulars</b>	Values/
	Ratios
Enterprise value	43286.42
Capital	13,051.39
Employed	
EV / Cap	3.3166138
Employed	
ROCE	84 09%

Earnings Yield	0.031112	
Price to Earning	32.14159	
Valuation		
Particulars	Values/Ratios	
Enterprise value	12,48,851.28	
Capital Employed	6,43,639.66	
EV / Cap Employed	1.940295724	
ROCE	12.68%	

Appendix 7			
Marico Ltd			
Ratios		Amount	
EPS	6.53	6.53	
DPS	3.498	3.498354	
BOOK VALUE	24.52	24.52	
Dividend Payout	0.535	0.535736	
Dividend Yield	1.866	1.866592	
Price to Dividend	90.30	90.30677	
Earnings Yield	0.020	0.020669	
Price to Earning	48.38055		
Receivables T/o	23.1202		
Receivables Days	15.78706		
Payables T/o	5.155	5.155893	
Payable Days	70.79	70.79278	
Inventory T/o	2.674	2.67407	
Inventory Days	136.4	136.4961	
Current Ratio	2.519	2.519058	
Quick Ratio	1.151	1305	
Cash Ratio	0.086	0.086552	
Operating Cycle 81.49		9033	
CAGR for the past 5 years is 9.28%		9.28%	
Valuation			
Particulars		Values/ Ratios	
Enterprise value		40667.98	
Capital Employed		2,940.43	
EV / Cap Employed		13.83062341	
ROCE		164.97%	

Appendix 8	
Eicher Motors	
Ratios	Amount
EPS	572.17
DPS	100
BOOK VALUE	2680.11
Dividend Payout	0.174773
Dividend Yield	0.003362
Price to Dividend	297.4198
Earnings Yield	0.019238
Price to Earning	51.98102
Receivables T/o	166.4818
Receivables Days	2.192433
Payables T/o	17.50142
Payable Days	20.85545
Inventory T/o	11.90273
Inventory Days	30.66523
Current Ratio	0.935817
Quick Ratio	0.713998
Cash Ratio	0.014178
Operating Cycle	12.00221
CAGR for the past 3 years is 3	32.16%
Valuation	
Particulars	Values/ Ratios
Enterprise value	80719.64
Capital Employed	4,068.18
EV / Cap Employed	19.84
ROCE	173.00%

## Impact of Brand Equity on Earnings Efficiency of Indian Private Sector Banks- An Empirical Analysis

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## **Abstract**

A resilient brand is one of the most important assets of an organization and banks are no exception, to ensure sustainable growth and combat tough competition. The Indian banking structure includes competition not only from domestic banks but also from foreign banks. Banking business is based on the trust of customers. A good bank brand is a prestigious, highly trusted by customers and an influential parameter in selection of banking services by customers. Banks are slowly beginning to comprehend that there is a need to manage their brand. Brand is an emotional connect that an organization builds with its customers which is based on integrity, reputation and quality of the organization. This implies that brand is an asset for the organization and thereby if not managed will affect the business performance, which in banking terminology is termed as earnings efficiency of banks.

Under this backdrop, the paper aims to provide empirical evidence of factors that impact banks brand equity in a specific context of private sector Indian commercial banks. Data is collected using random sampling technique and a questionnaire was circulated to 176 respondents using banking services. The necessary secondary data was compiled from audited financial statements and annual reports for a period of five years i.e. from year 2013-2014 to year 2017-2018. Panel data regression and Pearson correlation tools was used for statistical analysis to examine the impact of branding expenses on earnings efficiency performance of banks. The regression analysis indicates that branding expenses have a significant impact on the earnings efficiency performance of Indian private banks.

**Key words:** *Earnings Efficiency, Private Sector Banks, Brand Equity.* 

#### INTRODUCTION

The banking sector plays an all-encompassing role of a catalyst towards the socio-economic development of a country (Jaffe and Levonian, 2001; Rajan and Zingales, 1998). The Indian banking sector is referred to as the backbone of the Indian economy and occupies an important and pivotal place in a developing country like India. Despite of positive regulatory support towards Indian banks and the facilitating business environment in which the Indian banks function, banks today are experiencing a challenge from the term 'change' and the forces which drive our global economy is making it even more difficult for Indian banks to keep up with their brand lifespan. This is because brands themselves are dynamic in nature and have their own life cycles. Just like other brands, banking brands also do not stay forever. They come into being in

the business environment, grow and prosper over a time span in order to become successful and then move into the decline stage and are slowly then wiped out of the market. In order to have brands with longer lifespan and moreover in order to have lasting brands, Indian banks will have to continuously meet the ever evolving needs and requirements of their customers.

In the past few years, banks are becoming more conscious about their image and are laying an increasing emphasis on their brand management strategies. The increasing competition other banking players has also coupled and forced Indian banks to immediately undertake strategies for managing their brands so that their brands don't get diluted. Almost all Indian commercial banks have started undertaking aggressive and strong branding strategies to build a permanent and upright image in the minds of the customers. Under this backdrop the paper aims to provide empirical evidence of factors that impact banks brand equity in a specific context of private sector Indian commercial banks. The study also analyses the impact of brand equity dimensions on earnings efficiency of Indian private sector banks.

#### LITERATURE REVIEW

Branding is employing marketing strategies to augment the product or service image of a particular business so that it attains a favorable recall in the minds of the customers and is more readily recollected by them (Stine G. ,2005). Branding witnessed its growth during the era of industrial revolution when the market was swamped with several competing products (Phil Phillips, 2006). From then, till today, the entire function of branding has changed radically and more companies have been shifting away from building up and making their products successful to making their brand image successful (Thomas S.V., Agrawal S. and Mehta S., 2011). To build a successful brand it is vital that the brand is effectively communicated to all (Thomas S.V., Agrawal S. and Mehta S., 2011). Brands are not objects rather brands are demonstration of a highly valued idea that exist in in the mindset of consumers and stakeholders (Sachin Joseph, 2011; Kharya D. ,2013). It therefore becomes extremely important and pertinent for banks to enhance their image as banking customer perceptions about individual banking brands are becoming increasingly important for long-term success of any bank (Bossone B., 2002).

There is no substitute for a strong brand reputation. It takes time to build, and it's hard to regain if it falters (Stine G., 2005). That sentiment has special relevance for banks, especially after the financial turmoil of 2008 (Sharma R.K., 2011).

From the consumer viewpoint, banking brand is an indicator of quality. It is the trust the bank is able to repose in the minds of its customers (Uma Shankar Mishra, et.al., 2010). The biggest opportunity for the Indian Banking system today is the Indian consumer. Demographic changes in terms of income levels and cultural moderations in terms of lifestyle ambitions are changing the profile of the Indian consumer (Vinayak A.J., 2011). The Indian consumer now seeks to fulfill these aspirations by exploring finance options from Indian banks. This is leading to a growing demand for competitive, sophisticated retail Banking services (Kamath K.V., et al., 2003). This therefore requires our banks to take steps to build the trust and recall factor in the minds of Indian consumers (Sharma R.K, 2011).

In the past the Indian banks did not have a focused approach on undertaking branding. This has changed currently and in the past few years, the banking industry has witnessed that banks in India have started to become more cognizant about their brands, which are competing in the marketplace and have started to shield, distinguish and nurture their brands in the market (Kircher H.J., 2010).

Banking customers in India are nowadays well informed and more knowledgeable. Their mindset is also changing very quickly and so the brands themselves have to adapt to the changing customer's taste and preferences (Sharma R.K, 2011). As a result, banks have to undertake strong and firm branding strategies to cope up with these changes taking place among Indian customers (Dagar C. and Khanna P.,2011). It is however to be realized that the participation of all the stakeholders of the bank is required to be involved when banks undertake strong branding strategies since it also involves a huge cost (Uma Shankar Mishra, et.al., 2010). Another aspect of branding is the brand loyalty of a customer to the banks which is seen in his continuous association with one bank even after intense competition in the banking industry (Sharma R.K., 2010). This brand loyalty helps a bank to achieve a strong position in the competitive banking business. Most of this brand loyalty especially in the banking industry is attributed to customer services which helps to builds loyal customers to the banking brand (Lohani M.B., and Bhatia P.,2012).

# **OBJECTIVES OF THE STUDY**

- a. To identify the factors that impact banks brand equity in a specific context of private sector Indian commercial banks.
- b. To analyze the impact of brand equity dimensions on earnings efficiency as represented by ROE and MPS of Indian private sector banks..

# SAMPLING AND DATA COLLECTION

The present study is exploratory and is based on quantitative research approach. The convenient sampling method was adopted for collection of data from a cross section of customers who avail the banking services in India. Total responses collected was 176 from 198 distributed questionnaires; totaling to a response rate of 88 percent.

The findings of the paper are based on a detailed analysis of data obtained by questionnaires, observation and interviews with Indian banking customers. The data collection comprised of two key initiatives, questionnaires to cross section customers in Mumbai who use the banking services and in-depth interviews with bank managers of Indian banks who are responsible for designing and implementing branding strategies in banks.

The sample is a panel of 16 banks operating and listed banks in the country (Refer Appendix-1). The present study examines the impact of branding practices on the Earnings Efficiency (roce) and mps Performance of 16 Private Sector Banks that are listed banks. The data for all the 16

private sector banks which is the sample for the present study is compiled from the annual reports of respective banks extracted from the individual banks respective websites. The branding determinants considered for analysis are number of advertisement and promotion expenses (ape), direct marketing expenses (dme) and communication expenses(ce)all extracted from the annual reports of the sample banks. Panel data regression and Pearson correlation tools are used for statistical analysis. Panel least square estimation is a statistical method which deals with two-dimensional analysis i.e. cross sectional (group effects) as well as times series (time effects). The generic panel data regression model looks like

yit= 
$$\alpha + \beta x_{it} + \mu it$$
  
 $\mu_{it} = \mu_i \text{ to } \mathbf{v}_{it}$ 

Where y=dependent variable, x= independent variable,  $\alpha$  and  $\beta$ = coefficients, i and t= indices for individuals and time,  $\mu$ it =error term

Fixed group effect model: It examines group differences in intercepts. It assumes the same slopes and constant variance across entities or subjects. This Model considers the intercept as variable and uses dummy variables to account for differences among individual units with regard to the value of intercept. Although the intercept term is allowed to vary across cross-sectional units, for each cross-sectional unit the intercept is assumed to remain constant over time, i.e., the intercept of each cross-sectional unit is time invariant. Fixed group effect model uses least squares dummy variable and within effect estimation methods e.g. Ordinary least regressions (OLS) regressions with dummies. Fixed effects are tested by the F test. If the null hypothesis is not rejected, the Panel least square estimation regression is considered accepted.

Fixed Effect Model equation specification: Yit =  $\beta 1Xit + \alpha i + uit$ 

Where  $-\alpha i$  (i=1....n) is the unknown intercept for each entity (n entity-specific intercepts). - Yit is the dependent variable (DV) where i = entity and t = time. - Xit represents one independent variable,  $\beta 1$  is the coefficient for that uit is the error term. Fixed-effects will not work well with data for which within-cluster variation is minimal or for slow changing variables over time.

The random effect model: The rationale behind random effects model is that, unlike the fixed effects model, the variation across entities is assumed to be random and uncorrelated with the predictor or independent variables included in the model. This model doesn't use dummy variable to capture presence of individual effect (α). The composite error term has two components that represent cross-sectional or individual specific random error component and ui which is a combined time-series and cross-section random error component, sometimes called idiosyncratic random effects, as it varies over cross-sectional units as well as over time. Random effect model uses generalized least squares when the variance structure among groups is identified. Hence this model is called random effects model, and has assumptions similar to the ordinary least squares estimation with regard to normality, auto correlation, multicollinearity and homoscedastic variances with regard to ui/εi. Generalized Least Squares method is used to account for auto correlation among composite error terms.

Random group effect equation specification: Yit =  $\beta$ Xit +  $\alpha$  + uit +  $\epsilon$ it

εit - Within-entity error

uit -Between-entity error

In random-effects there is a need to specify those individual characteristics that may or may not influence the predictor variables.

To decide between fixed or random effects the Hausman test is used where the null hypothesis is that the preferred model is random effects vis-à-vis the fixed effect model. The Hausman specification test compares fixed effect and random effect models. If the null hypothesis is not rejected in the model, it shows that the individual effects are uncorrelated with the other regressors. So the random effect model is better than fixed effect model.

# **Research Tools**

The data obtained from 176 questionnaires was transformed to SPSS compatible data form. The data was analyzed using descriptive analysis and factor analysis to identify the most significant factors that influence banking strategies taken up by banks in India.

# **Pre-testing of the questionnaire**

The research questionnaire was pre tested with the responses obtained from 30 respondents. The results of the reliability tests resulted in the Cronbach's alpha value of 0.749. Thus, the questionnaire is reliable and internally consistent with respect to data collection.

### **HYPOTHESIS**

In order to determine the impact of branding strategies on a relation of the customer with the bank the hypothesis formulated was

H01: Branding strategies adopted by banks does not impact a customer's relationship with the bank.

### DATA ANALYSIS AND FINDINGS

The data analysis is based on the responses received from the corresponding questionnaire circulated to respondents, who were the banking customers of Indian commercial banks in the city of Mumbai.

# Demographic Profile of the respondents:

The descriptive analysis of demographic profile using frequency modulation across the gender, age, marital status, occupation, income level and educational status was conducted results summarized. (Refer Table 1 for details on demographic analysis).

**Table 1: Demographic Profile of the Respondents.** 

		Statistics		
	Details	Frequency (F)	Percentage	
	Female	31	17%	
Gender	Male	145	83%	
Gender	Total	176	100%	
	Below 25	19	11%	
	25 to 40 years	102	58%	
	40 to 55 years	28	16%	
<b>A</b>	55 to 70 years	18	10%	
Age	70 years and above	09	05%	
	Total	176	100%	
	Married	102	58%	
Marital	Single	74	42%	
Status	Total	176	100%	
	Students	25	14%	
	Salaried Employees	46	26%	
	Businessmen	58	33%	
	Professional	48	16%	
Occupation	Retired	12	07%	
	Housewife	7	04%	
	Total	176	100%	
	Below INR 2,00000	17	10%	
	INR 2,00001 to INR 4,00000	48	27%	
	INR 4,00001 to INR 6,00,000	62	35%	
Income	INR 6,00001 to INR 8,00,000	40	23%	
level	Above INR 8,00,000	9	05%	
	Total	176	100%	
	Undergraduate	32	18%	
	Graduate	49	28%	
Educations!	Post Graduate	58	33%	
Educational Status	Professional Degree	37	21%	
Status	Total	176	100%	

The demographic profiling of the respondents clearly identified the summary of respondents that were using the banking services of commercial banks in India. Out of the total respondents, 83% were males, which clearly showed that the male customers frequented the bank. In terms of the age group, 58% of the respondents belonged to the age group of 25 years to 40 years of age. This is the vibrant age group that seeks to have lasting relationship with a bank since this is their income generation age. 58% of the respondents were married and majority of the respondents were either businessmen (51%) or salaried employees (43%). The respondents who were predominantly graduates (47%) or post graduates (54%), which implies that respondents had

reasonable literacy level. Majority of the respondents were between the income structures of `INR 4,00001 to INR 6,00,000.

# Factor Analysis:

After running the reliability test, factor analysis was performed on chosen variables using SPSS 16. The respondents were asked to rate the variables on a five-point scale based upon their experience.

The Kaiser- Meyer-Olkin (KMO) measure of sampling adequacy was 0.854 and the Bartlett's test of sphericity 0.0017. The results satisfied the validity of the data. Thus, it indicated that the sample was suitable for factor analysis. Barlett's test gives the total chi-square value at significant level of 0.000 which is highly significant (it should be 0.05 or less). (**Refer Table 2 for KMO and Bartlett's Test results**). The data was subjected to principal component method under factor analysis. The variables were reduced to 3 factors. According to the analysis this accounted for 76.624% of the total variance.

Table 2: KMO and Bartlett's Test				
Kaiser-Meyer-Olkin Measure of Sampling Adequacy .854				
Bartlett's Test of Sphericity Approx. Chi-Square		0.0017		
	df	188		
	Sig.	.000		

From the above table it is observed that p<0.05, which implies that there is significant evidence to reject H0, which implies that there is significant impact of branding strategies adopted by banks on a customer's relationship with the bank.

The Factor Analysis resulted into three factor (Refer Table 3)

Table 3: Rotated Component Matrix<sup>a</sup>

	Component		
	1	2	3
Banks branding strategies leads to increased customer base	.876	203	013
Banks branding strategies leads to permanent and loyal customer base	.860	224	042
Banks branding strategies leads to increased banks image	178	.889	033
Banks branding strategies leads to improved customers perception of the bank	.356	.816	-0.19
Banks branding strategies leads to customers being able to easily identify each bank	.315	.781	011
Banks branding strategies leads to improved banking services	012	.221	.787
Banks branding strategies leads to improved customer services	009	.337	.761
Banks branding strategies leads to increased banking products and services.	004	.456	.754

The factor analysis resulted into three factor (Refer Table 3), Factor-1, which signifies 'Customer', and includes variables like increased and loyal and permanent customers of the bank Factor-2, reveals 'Image and Goodwill', which includes variables like Customers being able to identify the bank from the other banks and improved image and perception in minds of the customers and Factor -3, indicates 'Service Quality' which includes variables like improved and increased banking products and services and improved customer services by banks. Thus

Customer is the most important factor which banks can first focus on while designing its branding strategies.

# Interview Analysis on brand management challenges:

The study involved interviews with top level banking executives to collect first-hand information as to what are the brand management challenges in Indian banking sector. Brand management is a relatively new concept for the banking industry since it is always perceived that brand management is more deemed fit for the manufacturing and consumer goods industry rather than the banking industry and hence the banking companies may not have the required competency to manage their brand in-house and may have to resort to external support.

The second challenge for bank brand management is that banks serve diverse types of customers with varying customers' requirements and preferences. This makes it complex to build a banking brand that is pertinent to all types of customers. Another brand management challenge that is unique to the banking industry is in the fact that the products and services that various banks offer are similar and short lived. Finally positioning the banking brand is also a major challenge due to the increase in number of banking acquisitions and ever changing trends and practices in the banking industry.

# Structure to implement brand management in the banking industry:

The following details out a structure for successful implementation of brand management in Indian banks

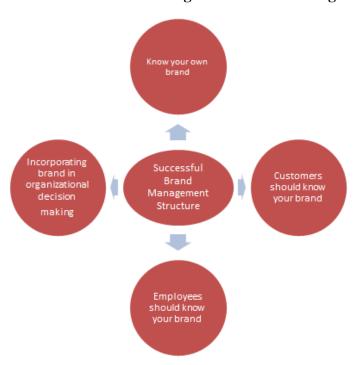


Chart-1: Structure - brand management in the banking industry

For successful implementation of brand management in banks, banks should first know their own brand so that they can differentiate it from their competitors. Once the banking company completely knows its brand, the next step is to identify those means of communication that will best explain the brand in the desired manner to the customers. It is also important to understand that the banks own employees' communication with customers should also reflects the brand. All communication by top management with employees should be consistent with banks brand strategy. Finally it is important to understand the extent to which top level management should take their brand into consideration, while making organization plans. It is important that the organizational plan should be consistent with the brand strategy.

## **CONCLUSIONS AND RECOMMENDATIONS:**

A banking brand is what your banking customers think about the bank when the bank is not there. There are two important key aspect in successful bank branding – executing the branding implementation structure along with prompt customer service and secondly to permit the bank to gradually build its own position in the minds of its customers, so that it can differentiate itself from its competitors and thrive the competition. When both this are adopted along with clear and concise marketing messages, it would lead to success of branding which would in turn enhance business performance. Currently the Indian market is full of a vibrant and young class of customers known as Gen-Y customers. These are an informed class of customers who have reach to certain sections of the public that was overlooked in the past by the formal banking system. The Indian economy is on the threshold of a major revolution, with several policy initiatives to be executed soon. Enhanced spending on infrastructure, speedy implementation of projects and continuation of reforms are expected to provide impetus to growth and the rapidly growing business would turn to banks for their credit needs. Besides this technological advancements have brought the mobile and internet banking services to the forefront.

With a strong branding strategy, the banking customers will observe that the brand is keeping up and delivering all that the brand has assured its customers that it will. The bank can thus take long term decisions to cultivate the brand further which will eventually enhance its business performance.

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# **Digital Transformation of Human Resources**

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### **ABSTRACT**

Automation and Digitalization have become the need of the hour today. Organizations have now started demanding strict control of their development and real-time employee analytics. With organizations taking an edge in the competitive world, the role of Human Resources too has shifted from an administrator to a strategic business partner focusing on providing quick solutions to business and employees by automating its processes. The role of HR has moved to revolutionising employee experiences by incorporating the latest technologies and providing an infinite workplace to employees. Human Resources is undergoing a reinventing phase striving to provide reformed online processes to employees.

Human Resource Departments have now started using Artificial Intelligence tools in all its functions to align with the organization's growing needs. This has extensively helped HR leaders to provide quick accessibility of their processes to employees. Artificial Intelligence has revolutionized the way in which new age employees interact with their organization. Access to the softwares can be sought by employees anytime and anywhere with the use of virtual systems. Thus, digitalization and Artificial Intelligence have helped organizations to transform into a new digital ecosystem altogether.

**Keywords**: Digitalization, Artificial Intelligence, SAP, mobile apps, chatbots, cloud solutions, analytics

Technology has over ruled the world in recent times and is today considered a stepping stone for the evolution of a world enabled by the exponential use of technology in many organizations. This has driven HR to renovate itself from a mere administrator to a strategic partner contributing to the overall success of the organisation by means of quick delivery of services. HR teams have now started rethinking the way people work and adding digital tools to make these solutions better. Digitalization is rapidly impacting the day to day functioning of organizations today both, in the public as well as the private sector. The shift in the working and communication patterns of organizations requisites innovative and out of the box thinking for better delivery of services to internal and external customers. Technology has thus changed the business operating models which have profound effects on the functions of Human Resources. The digital enterprise and digital HR are a revolutionary leap forward, not an incremental step. Hence the need for HR to adapt to digitalization identifying new approaches to manage employees more effectively and to create a unified system which will represent a new interface between the business and Human Resources. SAP, apps built with design thinking, video and mobile technologies are used to improve end to end user experience.

HR functions have a very crucial responsibility in digitalization as they lead the change and translate strategic objectives into competencies that will have to be constantly rejuvenated to keep up with business challenges and market trends. HR professionals need to anticipate the results of digital transformation in order to maximise the output since it will reshape the organization's digital identity completely. At the same time digital literacy and analytical skills have to be worked upon to do away with the traditional way of HR functioning and to accept the digital age. HR has now started using cloud solutions in order to pave way for the organizations growing needs. This is embarked with the advent of new digital technologies such as use of a mobile app. Digitalization has shifted organizational priorities thereby creating a high demand for talent in specific fields resulting in reinvention of recruitment and retaining processes. In addition to this, digitalization is gradually improving candidate engagement and integrating right people for the right job, identifying gaps in skills and helping employees to gain capabilities and to understand new digital competencies.

Digital HR is not restricted to just building apps. It comprises of developing a new mobile platform with a wide range of apps built with cloud and analytics technology behind the scenes. This platform can be used for hundreds of apps: from time and attendance to employee wellness, to recruitment, collaboration, goal-setting, and more. The design is integrated, the user experience is location-aware, and integrated data are used to inform and make recommendations to users throughout the day.

With the introduction of technology, HR issues will now be focussed around disruptive technological trends and business models. This is due to the capability of HR to drastically shift and change its systems and practices into new ones based on new technology.

Digitalization of HR has posed a complete different way of looking at HR dimensions. The replacement of old systems and process into a cloud based module, integrated mobile app design and the real-time HR operations clubbed with the principles of behavioural economics, the use of analytics and constant iteration on design have all contributed to the transition of HR in the modern age. Digitalization of HR has paved the way to better partnering with IT, adopting new design thinking, using integrated analytics and analysing vendor solutions carefully. Incorporating design thinking throughout the process will help organizations maximize the impact of new digital technologies. It has posed a completely different world for technology and design teams thereby creating more career opportunities for people at large. The use of technology has defined the way HR processes are designed, delivered, accessed and operated.

Many organizations have now started thinking about automating their HR processes to stay in tune with the changing business needs. "We are seeing some companies starting to test their cultures and make changes to better align with today's workforce climate and employee expectations," says Rachna Mukherjee, CHRO of India Zone for Schneider Electric. She states that her organization is gradually changing its culture in order to be more focussed on building capabilities for innovation and to accept automation positively and constructively.

Procter & Gamble in its effort to digitalize its processes is now implementing "decision cockpits." This new technology will work on the need to empower employees at all levels

through data. The cockpits take the form of real-time, one-stop screens which portray the existing state of the business and any important trends. This data will be accessible to all employees at any time, helping them stay informed and engaged.

Procter and Gamble has also recently developed 'consumer pulse'. This technology uses Bayesian analysis to scan the universe of comments, categorize them by individual brand, and then put them on the screen of the relevant individual. This new technology has enabled Procter and Gamble to get a real-time grip of the current state of the marketplace. This helps them to react immediately in case anything goes wrong in the blog. The technology also helps them to improve things that are redundant. In addition to this, Procter and Gamble is also introducing a product called Downy Unstopables, which is a fragrance addition that can be added by a customer to his wash.

## ARTIFICIAL INTELLIGENCE

Artificial Intelligence technologies offer significant opportunities to improve HR functions, such as self-service transactions, recruiting and talent acquisition, payroll, reporting, access policies and procedures. Today, Artificial Intelligence capabilities have reached newer heights and have a major impact on how we operate our business. Human Resource executives have faith that merging Artificial Intelligence into HR administration functions will benefit and improve the overall employee experience. This will provide more capacity, more time and budget, and more accurate information for decisive people management.

Use of Artificial Intelligence in HR paves a way to produce, execute and operate an everincreasing amount of HR data in the cloud. It helps in effectively combining people, process and technology intelligently to deliver transformational value at optimized costs. Many back office functions have been efficiently automated by Artificial Intelligence thereby leading to reliable HR transactions and better service delivery.

Artificial Intelligence helps organizations to stay up to the competition and has significantly improved their decision-making process. It has also helped in making administrative duties more reliable and efficient. Artificial Intelligence has freed HR professionals from their day-to-day transactional jobs and enabled them to focus more on strategic planning at an organizational level.

Artificial Intelligence processes data more quickly than an average human. It is also able to cast a wider net, bringing attention to people who employers might not have considered or who may not even be looking for work. Having more qualified candidates from the beginning shortens the process, enabling managers to dedicate more time to analyse HR data and improve strategic planning.

Artificial Intelligence is a step by step impetus in staffing since it helps in acquiring the right information, with lower costs and within the set timeline. It can easily be woven into the onboarding process. It helps as a guide to new joiners assisting them with the organizations

processes. It has also seemingly tied up various employee life cycle processes which in turn satisfies the employees by way of quick resolution of their queries and concerns.

In addition, conversational Artificial Intelligence transactions can help in variety of processes such as updating personal information on behalf of the employee, allowing the reporting manager to access his or her subordinate's information via a chatbot and perform HR business transactions without accessing the core HR application. Chatbots authenticate an employee and provide only authorized information with which the employee can access and transact. Transactions having an approval chain process can be seamlessly intertwined by Artificial Intelligence. However. Artificial Intelligence requires customization and is not easy to standardize.

Artificial Intelligence plays a larger role within HR to support smart people analytics in innovative ways to attract top talent. Technologies that enhance the candidate experience and meet expectations will help distinguish an organization from all the others.

Many organizations face the challenge of making key data accessible anytime, anywhere and in any medium (voice, text, conversation). With the introduction of chatbot, life has become simpler for such organizations. A Chatbot provides intuitive instruction and performs pattern studies to act as a smart and efficient assistant. The bot uses logic to determine user inquiries and connect with enterprise systems to get the desired results. Machine learning plays an important role, working with patterns and using cleaner sets of data.

Artificial Intelligence based HR applications have led to tremendous increase in the productivity of employees and a sudden rise in knowledge levels of SAP consultants. HR applications empowered by Artificial Intelligence have an ability to analyze, predict, diagnose and become more powerful and capable resources.

Google has embraced Artificial Intelligence in recent times. Its Machine Learning Algorithm helps in providing more accurate results for each user which in turn provides a better use of experience. In addition to this, Google also uses technology for self-driving cars. With the use of this technology, the cars will be able to analyse the road ahead of them. This also helps in advance judgement and helps ensuring that the people riding in the car are well protected.

Siri from Apple is another technology used by Google in recent times. With its help, Google will learn about the locations where an individual visits or eats at. Apart from this, Google also pulls in information from events and emails which help them to display information to the people that they might want to see at the fraction of a second.

Cyber Infrastructure. Inc's technology adheres to globally recognized standards which helps their clients to attain success in achieving their business objectives. They provide highly optimised solutions and services across wide range of industry domains such as application development, open source development, mobile application development, business intelligence and analytics, business process management, cloud infrastructure implementation, front-end design and digital marketing.

Coming to the banking sector, ICICI Bank has been the first bank to deploy robotics to handle

several transactions such as financial operations, money investing in stocks, managing difference properties, handling customers and giving them a quick solution.

## **STATISTICS**

A survey conducted by KPMG in 2018 of 1,201 Senior HR executives from 64 countries gives a clear indication of rampant digitalization of HR across the globe. Given below are its findings:

40% of the HR leaders said that they have a digital work plan in place at the enterprise or HR level and 39% of them were confident in their ability to transform the workforce and itself while 24% of the HR leaders struggle to adapt to the digital era. HR in many organizations is not seen as a value addition department. It does not have predictive insights and is timid of Artificial Intelligence In the survey, around two-thirds of HR executives agreed that HR has undergone or is undergoing a digital transformation. Around 70% of the HR executives recognized the need for workforce transformation. Yet barely a third i.e. 37% of them felt 'very confident' about HR's actual ability to transform and move them forward via key capabilities like analytics and Artificial Intelligence

Around 41% of the respondents felt that workplace culture is a top barrier to digital transformation. While 35% said that their current culture is more task-oriented rather than innovative or experimental. 67% of the respondents believed that organizations which view HR as playing a strategic role in their business are more likely to pursue digital transformation as against 48% of the respondents who felt that the role of HR still remained unchanged.

Despite the data's remarkable ability to deliver new insights and enhanced decision-making, barely 20% of HR leaders believe analytics will be a primary HR initiative for them over the next one to two years. Fewer still, only 12% of the respondents cite analytics as a top management concern.

49% of the respondents had till now invested in Human Capital Management over the past two years while 32% of them in cloud capabilities. Over the next two years, 60% of the respondents were planning to invest in predictive analytics, 53% in enhanced process automation and 47% in Artificial Intelligence.

Currently only 36% of HR functions have started to introduce Artificial Intelligence while 14% have invested in Artificial Intelligence over the past two years. Of organizations yet to adopt Artificial Intelligence within HR, half remain uncertain that they will do so over the next year or two. Among those who have invested in Artificial Intelligence till date, 88% call the investment worthwhile, with the focus primarily on learning (35%) and analytics (33%).

Workplace culture also remains a top barrier to digital transformation for about 4 in 10 HR leaders with more than one third saying their current culture remains task-oriented rather than innovative. Half of them sight capability (skills) as slightly less capacity (resources) as a top barrier to moving these efforts to scale.

42% of the respondents believed that Artificial Intelligence is the biggest challenge that organizations will face in the next five years. Of those HR leaders who have not planned to focus on Artificial Intelligence anytime soon, half of them confirm that they are not at all prepared and barely a third feel they are somewhat prepared. Fewer than one in 10 feel that they are prepared or very prepared for the changes to come.

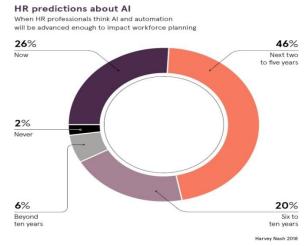
The survey revealed that HR analytic initiatives remain a low priority among HR leaders and their businesses – ranking next to last among 10 potential HR initiatives. And this despite more than half of respondents citing analytics as a key skill needed for optimizing the integration of Artificial Intelligence and over 80% agreeing that HR can provide value through analytics.

Despite impressive results at these and other organizations, too many HR departments have yet to embrace this transformation. Today, only 7% companies use mobile technology for coaching, 10% for performance management, 8% for time scheduling, 13% for recruiting and candidate management, and 21% for leave requests. The power of digital transformation is only beginning to emerge.

The new world of digital HR is arriving fast, but, according to the survey, only 38% of companies are even thinking about it and only 9% are fully ready. Nearly three-quarters of companies, or 72%, believe this is an important priority and 32% define it as very important, so it will be a major area of opportunity for HR in times to come.



Source: https://www.raconteur.net/hr/ai-hr-human



Source: https://www.raconteur.net/hr/ai-hr-human

Digital technology has been a boon in integrating learning into the day to day work routine of the workforce. Video learning material, online support, user friendly apps have facilitated tailored learning framework which can bridge the gap between current and future workplace competencies. Digital tools have helped companies in advocating pay for performance culture and online tools are providing a different management approach to gain more and accurate strategic insights to all employees' incentives.

Introduction of digitalization and Artificial Intelligence has given rise to a digitally empowered environment with HR emerging as the biggest influencer in making data-driven decisions to accelerate the business performance. Collaboration of employers with employees has now become possible due to digitalization.

The barriers between work and personal life are slowly mitigating through the use of mobile devices. Mobile has become the channel of preference for both the employers and the employees, giving organizations an opportunity to drive adoption of mobile HR technologies to an extent rarely seen with traditional HR platforms.

When HR functions are moved to apps in a thoughtful way, HR can receive 10 times as many responses from employees compared to traditional systems. Employee productivity can improve. Data quality can rise. Unsurprisingly, leading companies across all industries are embracing this trend.

HR professionals need to be more agile in order to cater competitive business environments to eliminate the risk of being non-existent and re-establish organizational norms to support a digitalized culture which also paves a road to easier and effective communication within the organization.

Automation and Artificial Intelligence have turned into a reality today. The culture and atmosphere of the organizations have changed drastically with the rise of new technology trends into their routine day-to-day work. This does not isolate HR and its multifarious functions from the rest of the world. HR is now witnessing Artificial Intelligence and Automation at the top of its game with the invention of 3D printing, Internet of things (IoT), virtual assistants, smart

algorithms, use of intelligent software's, HR applications and advanced robotics. Digitalization and Artificial Intelligence are thus posing a challenge for the traditional way of carrying out business.

Digitalization is been widely used across various industries today including the manufacturing, healthcare, automobile, education, transportation sectors to name a few across the world. With the introduction of digitalization, HR will necessarily have to mould itself to fit in to the latest technological trends to reach out to maximum number of people with efficiency and process driven technology. Else, the role of HR will soon become redundant in the times to come.

HR's digital transformation thus begins with a change of mind-set within the HR organization, prioritizing connectivity, real-time operations, platforms, automation, and mobile-first. For many organizations, both in HR and across the enterprise, digitalization can be looked up as a revolutionary opportunity. The digital HR journey focusing on the employee and HR experience is one part of the larger digital HR challenge to answer the question, "How can HR play a role in developing the overall digital enterprise strategy, organization, and culture?"

## CONCLUSIONS AND SUGGESTIONS

In the coming decade, we foresee that there will be some sort of algorithm used by organizations in most of their decisions made, be it big or small. A well planned and developed technology requires two core things — a well-built cultural mind shift and a sound change management framework. While we envisage that digitalization of HR with take a fast pace in the coming days, it is equally true that change is difficult and some organizations will struggle with it. Organizations must think about digitalization as a platform for the augmentation of human thought and not as a tool to turn down the efforts, reigns of creativity and ethics over man made machines. Special emphasis should be placed on maintaining a sense of civility, creativity and equality in digitalizing systems before they are finally released. The goal of every organizations in such promising situation then should be to plan, develop and implement small changes that speak directly to individual employees, the impressions of which lasts well into the future.

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# **Study of AI and EI Tools in Talent Acquisition**

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# **ABSTRACT**

This study was undertaken to understand how the traditional hiring process can be altered by "Artificial Intelligence (AI) & Emotional Intelligence (EI) tools in Talent Acquisition". This study gives an overview of evolution of Artificial Intelligence & Emotional Intelligence and describes various types of AI & EI tools that could be used in acquiring the best fit for the organization. The primary objective of the study was to find out the awareness of AI & EI tools across industries and to suggest its benefits and challenges to the organization. The Methodology used for this study was descriptive in nature. The research was carried out through a survey of professionals which was a primary source of collection. And secondary data was taken from articles, magazines, books and different websites. As per the findings of the study, it is concluded that the traditional hiring process fails in various areas like bias interviewers, assessing candidate's soft skills, etc. Innovations like programmatic advertising, CV screening, video interviews, etc. can be done efficiently and quickly by implementing Artificial Intelligence tools. The final decision of hiring the candidate can be done through Emotional Intelligence tools by assessing the candidate's approach towards work depending upon his grade. Companies need to rethink their strategies and technologies and alter the Talent Acquisition process. This change should take place by implementing a balance of Artificial Intelligence & Emotional Intelligence tools in acquiring the best fit for the organization. Adopting Artificial Intelligence & Emotional Intelligence Tools will help us establish a fruitful model of human knowledge, skills and attitude.

**Keywords:** Artificial Intelligence, Emotional Intelligence, Innovation, Digital, Talent Acquisition

### INTRODUCTION

The rapid changes in technology industry has redefined the talent acquisition landscape, and with new business priorities companies are expected to hire candidates with strong fundamentals through various digital and non-traditional platforms. Nothing we do is more important than hiring and developing people. Because at the end, we bet on people, not on strategies. The concept to bring new talent to your organization should be considered as a strategic initiative. Talent acquisition includes the tactics of recruiting but also some strategic elements that help your business grow.

Top trends like diversity, data, analytics, Artificial Intelligence & Emotional Intelligence are shaping recruitment and hiring. In this era technology has become an inherent part of everyone's lives. Which has led to people wanting their careers in the tech domain. And this is the reason before hiring the perfect talent for technology, the recruiters need to go beyond the job description and specifications and need to gain deep insights about whether the candidate can adapt and strive in the organization's culture. The goal should be selecting the candidate whose skills, knowledgeand attitude that fit their nature of the job and the organization the best.

It's believed that the growth of AI will have a drastic impact on markets and workforces. It will surely will affect the human resource department and will take over the monotonous jobs, but it will create more jobs which require human intervention. There are a lot of thigs machines will do better and quicker than human beings, like gathering and analyzing the data, interpreting the results, recommending course of action and implementing it. A task that is going to drive new approaches to talent search and hiring would require traditional hiring practices to be replaced withdigital hiring models.

AI is no longer science fiction, it has already been adopted in various industries such as manufacturing, healthcare, finance, entertainment, and education. Not only does automation through AI lead to cost savings, it is also expected to result in robust productivity growth. And this rise of automation has increased the importance of emotional intelligence.

The traditional hiring processes are becoming more work/role specific and analytical. Emphasis is being laid upon the candidate's behavioral attributes and attitudes apart from their functional knowledge and expertise. The requirement of EI increases as the grade of the employee increases. Assessing candidate's EI will become as important as assessing their knowledge and cognitive skills. AI systems certainly will help gain sufficient knowledge about the candidate, however, it is EI that will allow to connect deeper and more meaningfully with the candidate. Thus, having a harmonious balance between AI & EI will ensure desired results for the organization.

This report gives an overview of a few globally available AI & EI tools which can be used to acquire the best talents. Also, it shows benefits and challenges of implementing those tools into the current traditional hiring process of the organization.

### LITERATURE REVIEW

Dr. Aruna Deshpande, in his research on Talent Acquisition through Technology, concluded that as time goes on, the recruitment process will become ever more —smart as recruiters and hiring managers utilize ai, machine learning and data analytics to get a complete understanding of the candidates they engage with. Candidates will be engaging via mobile devices and receiving tailored responses from intelligent chatbots. Of course, ai will not replace the human operator, but it will help to make recruiters more effective at talent acquisition in the future. Accelerating digital, video, and cognitive technologies and ever-increasing transparency are quickly changing how recruiters find and court skilled employees. A recruiter in this new world can add value by building psychological and emotional connections with candidates and constantly strengthening the employment brand.

Lane B. Mills and East Carolina University, November 2009, A Meta-Analysis of the Relationship Between Emotional Intelligence and Effective Leadership, proposed that emotional intelligence is a component of transformative leadership that should be evaluated and developed. The results of this study suggest that emotional intelligence may now need to be considered as a component of leadership effectiveness. Skillful handling of situations and people, reflective of leaders aware of the importance of emotional intelligence should be given the same attention and importance as the more traditional leadership tasks of budget, finance, and operational skills.

Dr. Venkatesh. J, Mrs. Dhibiya. P, Thenmozhi. S and Manjula Gandhi. S in their research paper Changing Dynamics of Talent Acquisition – A Tool for Managing Business Teams, states that Foremost companies capitalize in talent management to select and keep the best person for each job since they identify that business success is mechanical by the total talent quality of their workforce. Open Recruitment is a new ideological structure that permits these fundamental threads to be mixed in a coherent model that convey talent, stable organizational stability and minimize costs. When a company's talent management procedure develops in the manner defined in this article, companies will be averse to go back to the stop-gap proceedings of recruiting and retention. Their business model stimulates social innovation, temporary jobs and preserve resources. Social entrepreneurs have increased the bar so high and filled the space where a dismissive government and overwhelmed considerations fall short. They have related in technology and social innovation below the same ridge while carrying out the social mission with the strength of a missionary. Managers may be surprised by how frequently the talents they want exist in right under their nosesor the noses of peer groups an area away.

Pranav Kharbanda, Jyoti Sapramadan research topic Emotional Intelligence in Recruitment and Selection, concluded with statement desired by the enhancement of such emotional intelligence level is so much important in the life of an individual whether it is employed personnel or a business man. The examples stated clearly explains the role of stability in such a manner where the output is totally dependent on the employees EI. Emotional Intelligence is the ultimate force which acts as a shining light which leads us to professional success.

Anisur Rahaman, Nirmal Chandra Roy The Changing Dynamics of Talent Acquisition: An Indian Perspective, anticipate more aspect of talent acquisition to be automated and outsourced in the coming future. Some of the functions that will be out sourced may include payroll. We also see a trend for talent acquisition managers to take on more responsibility for the actual supervision and development of their employees besides their traditional role to help out employees with the overall interpretation of HR policy. Talent acquisition has emerged as a key business imperative for organizations for its role in sourcing the right talent to ensure long term growth. It is now a long-term strategy for organizations and HR functions for their role in driving the overall corporatesuccess and profitability of the organizations.

Anjana Raviprolu, April 2017, research on Role of Artificial Intelligence in Recruitment, states that Industry experts also convey that by implementing Artificial Intelligence, recruiters and hiring managers can gauge problem-solving skills and teamwork capabilities in real-time. The intent is to learn more about candidates by developing their learning and critical thinking skills. It can be said that AI is definitely going to be the next big thing in recruitment and it is all set to redefine the overall process of recruitment in the coming future.

Dr. Saundarya Rajesh, Mr. Umasanker Kandaswamy and Ms. Anju Rakesh, 2018, research on The Impact of Artificial Intelligence in Talent Acquisition Lifecycle of Organizations, states that it needs to be remembered that, AI cannot completely replace the human element in the human resources function. HR and TA leaders should design their strategy by ensuring they are making the best use of their resources empowering recruiters with technology. A good starting point would be to automate routine and repetitive hiring tasks such as screening and then progress towards higher intelligence-based hiring tasks such as candidate engagement. Now is the time to adopt AI to gain a competitive edge in recruiting. AI is empowering recruiters today to become smarter and more efficient by significantly enabling the hiring process. Utilizing AI tools present in the market, recruiters can revolutionize their recruiting strategy, every day. Combining Human Intelligence to propel AI forward, especially so in the Talent Acquisition function, holds a huge promise for organizations – that of best fits driving organizational efforts across business dimensions.

Geetha R and Bhanu Sree Reddy D, in their research on Recruitment through Artificial Intelligence: A Conceptual Study, concludes that now the recruitment industry is taking up growth by implementing smart way to recruit i.e., recruiting through artificial intelligence. And numerous industries are focusing on the changes taking place in recruitment process. AI technology has tremendous impact on recruitment activity as it enables the recruiter to align all some unstructured candidate bio-data, construct profile into uniformity, identify and match skill sets required for the industry. In today's era, recruiters think AI technology is competing with them for recruitment activity. But it is human built software to make the work at ease while the process is carried on. To conclude the role of AI it is the combination of humans and AI that leads to data maintenance, save the cost and time to the organizations with more accuracy and access in total recruitment process.

Sandhya Mehta, July 2013, research topic A Review paper on emotional intelligence: Models and Relationship with other constructs, predicted a significant relationship between emotional intelligence and other variables like personality, leadership, teacher effectiveness, academic achievement, conflict handling, stress etc. Also, it states that much work is being done to discover exactly what emotional intelligence encompasses and how it would be most effectively applied.

Herpertz S, Nizielski S, Hock M, Schütz A (2016) The Relevance of Emotional Intelligence in Personnel Selection for High Emotional Labor Jobs, states that although a large number of studies have pointed to the potential of emotional intelligence (EI) in the context of personnel selection research in real-life selection contexts is still scarce. However, there were inconsistent effects on applicants' ability to understand emotions: Whereas the ability to understand emotions had a positive effect on performance, interview and role play, the effect on performance in group exercises was negative. The effect depends on the type and conclude that tests of emotional abilities should be used judiciously in personnel selection procedures. Focusing on the abilities to perceive and regulate emotions seems to be useful for selecting individuals.

## ARTIFICIAL INTELLIGENCE IN RECRUITMENT

AI has made major advances in the realms of recruiting. Artificial means something that does not occur naturally. Its simulated. And intelligence is the ability to understand, to think and to learn. Its these characteristics that make machines to appear smart. Machines achieved this through their ability to analyze large amounts of data and to recognize patterns within this data. The recruitment industry has growing number of products that are available to augment the hiring process.

The major benefits to recruiters will emerge from hardwired systems that will require human intervention. This will enable us to process more talents and speak to candidates on one-on-one basis. Talent crisis is not something that is new to the IT industry. The industry has forever faced the bid challenge of attracting and hiring the best engineering talents. A task that is going to drive new approaches to talent search and hiring would require traditional hiring practices to be replaced with digital hiring models. Also, companies emerging as attractive workplaces are also making the competition much more intense. Hence, we will see hiring models go digital as companies seek faster turnaround times and better ROIs from their people investments.

With millennials being a bulk of the workforce, companies will need to invest in new ways of attracting and engaging with the potential recruits.

### EMOTIONAL INTELLIGENCE IN RECRUITMENT

Often, while hiring the things that are highlighted are the persons academic background, and how dedicated they are for this job and if their scores fit the reputation and criteria of the organization. What is missed is the persons Emotional Intelligence. How aware are they? How well they handle stress or other emotions? Do they possess the desired interpersonal and communication skills? Are they people oriented? The question of the hour is, is EI an important aspect to look into while hiring? Well yes, EI goes beyond your academic reference. What the organizations look for is sustainability, which can be found through EI. Of course, academics matter, however, even if a candidate is high on EI and has a decent academic record should be hired if they are a fit for the organization's environment.

# ARTIFICIAL INTELLIGENCE TOOLS

In talent acquisition, AI has already made its space with various assessment tools in different domains like: Advertising for candidates, identifying potential candidates, engaging with candidates and selecting candidates. Here are few AI tools to enhance the recruitment process:

**CLICKIQ:** ClickIQ is a predictive analytics tool that tells how many applicants the organisation is likely to get and spend required. It learns from every job to improve performance further. Attracts the best aplicants at the right time, reduces cost-per-application and ad costs. Also, it increases the reach and number of applications.

**TEXTIO:** Textio is an augmented writing platform for hiring. Textio is able to measure precisely how every word you use will statistically affect your hiring results. It predicts how well the job description you're writing will compete for talent with Textio score.

**CHATBOT MYA:** Chatbots are one of the best ways to engage candidates. Mya automates the process from resume to hiring. It uses AI and NLP to ask questions regarding qualification, expected salary, details about their past work experience, their area of interest and other basic questions. Also, it answers questions of the candidate regarding the company policy, benefits andavailable job opportunities.

**HIREVUE:** HireVue is known as an all in one powerful platform as it offers video interviews, assessments and automates the scheduling process. When a candidate takes a video interview, they create thousands of unique points of data. A candidate's verbal and non-verbal cues give insights of their emotional engagement, thinking and problem-solving styles. It's a combination of cutting-edge AI and validated science makes data driven talent decisions faster.

**PYMETRICS:** Play games, get hired. It uses neuroscience-based games, machine learning and data to help companies hire in a more diverse and predictive way. It focuses on social, cognitive and emotional traits that lead for success in different roles. The game shows how attentive, impulsive and risker seeker the candidate is. It is objective, predictive, efficient and unbiased.

**ZWAYAM:** Zwayam is known as the intelligent recruitment engine. Once the organization creates a job opening on the career page, Zwayam integrates with social media and relevant job boards to ensure maximum visibility. It seeks out candidates that make a match and even recommends top profiles that make the right fit for the organization.

**HAKER RANK:** It has an enormous library of questions of all difficulty levels that allows to create a great portfolio of questions for candidates. It also has a code pair tool that allows you to conduct a live coding session where the candidate can type the codes the interviewer can too and also has video capability through which the interviewer can see the candidate's reactions which gives a much more personal experience

### **BENEFITS OF AI TOOLS**

- Single bad hire can cost a lot
- A allows to focus on more the important stuff
- Adding AI to every level of your recruitment process, organizations can attract the required candidates, asks best questions, analyze the candidates based on their cognitive skills with statistical reasoning
- Improves the quality of the candidates by posting attractive job descriptions
- Engages the candidates automatically and builds intrinsic encouragement about the company's values and goals, ultimately enhancing candidate experience
- Optimizes the recruitment process by keeping it efficient
- Results are displayed statistically in an orderly manner
- Enables cost effective hiring and offers more effective hiring funnel creating a positive impact on long term return on investment

- Reduces cost of hiring additional recruiter and interviewers
- Faster hiring process without compromising with the quality of the candidate

All this can be done automatically with the best AI tools, allowing employers to spend more timeon analyzing the behavioral attributes and emotional traits for selecting the best fit.

## **CHALLENGES OF AI TOOLS**

As there is no single pill that can cure all diseases, there are a lot of challenges of these tools aswell.

- Huge investment required to implement these tools with the continuous maintenance costsas well
- Tech savvy employees are required
- Challenges the existing traditional hiring process
- Loss of jobs of recruiters
- A change in technology would lead to change in its approach

# EMOTIONAL INTELLIGENGE TOOLS

To check whether a person is high on EI and is a better fit for the organization the traditional interviewing process can be modified by framing better questions, giving situations in a which a person's endurance can be measured to help with the following process. There are various tests which are available globally, used by several companies across the world. A few of those tests are:

SIX SECONDS EMOTIONAL INTELLIGENCE: Six Seconds Emotional Intelligence assessment is a set of statistically valid tools that help measure and develop human capacity. The assessment provides solutions to help leaders ways to improve the people-side of performance. It assesses competencies and shows path for development. SEI score predicts over 54% of vital success factors- decision making, influence, effectiveness, risk taking ability etc. It includes robust psychometric and machine learning neural network for translating EI data to practical action steps. There are multiple results to meet the selection criteria.

**EMOTIONAL & SOCIAL COMPETENCE INVENTORY:** Emotional & Social Competence Inventory is the only model Daniel Goleman has worked upon. It is a 360-degree survey that determines outstanding from average performers. It rates a person on 12 competencies that are in four general areas. The four general areas include: self-awareness, social awareness, self- management.

# MAYER-SALOVEY-CARUSO EMOTIONAL INTELLIGENCE TEST: It was developed

by academics at Yale and the University of Hampshire. It is an ability-based measure of EI which requires people to actually use their EI to solve problems based on everyday scenarios rather than simply asking people to subjectively rate themselves. It includes questions that measure EI in 4 key areas. Perceiving or recognizing emotions, facilitating thought or using emotions, understanding emotions and how they may change and manage one's own and others emotions.

**GENOS EI INVENTORY:** Genos EI is a behavior-based assessment test. It's a 10 minutes assessment that covers various competencies like authenticity, resilient, present, empathy, empowerment, expansive thinking and problem solving. It gives insights about how finely a person demonstrates EI at workplace. Results can be internally or globally benchmarked. The results also help candidates understand the basis of their score and how they can improve their EI too.

## **BENEFITS OF EI TOOLS**

It's not important to find the right skills in the person. It's important to find the right person who can develop and manage the required skills.

The one who can control and manage his emotions will be able to manage other's emotions well and ultimately have a control on the overall work, leading to productivity. It's very difficult to findthe right person.

- Helps employers select the finest candidate by comparing employee's attributes, traits, mental and emotional competencies to their nature of work
- Helps organization understand the employee's behaviors to manage them better and lead them effectively
- Gives an insight about employee's value system, beliefs and his attitude
- Employers can build dynamic teams
- Builds cohesive workforce and drives organizational success

## **CHALLENGES OF EI TOOLS**

- Requires trained supervisors required to conduct the tests
- Requires certified professionals who can judge the candidate's approach quickly based on the test results
- High costs involved to hire such certified professionals
- Results cannot be totally reliable
- Outcomes of different tests could have differences
- Results vary depending upon the background of the candidate.
- Candidates can fake their emotions to score better or get selected
- Requires professionals who can identify the fake emotions or hidden potential to succeed

## **OBJECTIVES**

- To study the various existing Artificial Intelligence & Emotional Intelligence tools in Mumbai used in Talent acquisition
- To suggest the benefits and challenges of different Artificial Intelligence & Emotional Intelligence tools to the organization

## **SCOPE**

- The project focuses on understanding the industrial trends related to Artificial Intelligence & Emotional Intelligence in Mumbai
- The project aims to cover comprehensively the usage, popularity and outcomes of Artificial Intelligence & Emotional Intelligence tools

### RESEARCH METHODOLOGY

The data used is secondary data which is collected by various sources like the internet, books and magazines. The research was also done through primary data with the administration of the questionnaire. The questionnaire was designed to analyze the awareness about AI & EI tools in talent acquisition. Respondents were questioned on various aspects of their recruitment process and their views on AI&EI tools. The questionnaire also included questions on demographic characteristics like name, gender, corporate experience, industry and domain they belonged to and their designation. The questionnaire was circulated to professionals through Google docs. HR professionals from IT industry were the major focus of the study along with professionals from other industries. Sample size was 60. The data was summarized using descriptive statistics i.e. bypie diagrams and bar graphs.

# **LIMITATIONS**

- Due to time constraints the study was limited to Mumbai city only
- Besides, the detailed study is based upon view of only 60 professionals across industries
- The present study is confined to a minimal sample of the entire population in general
- Data presented in this study is a conclusion of only one month

### **DATA ANALYSIS & INTERPRETATION**

- Out of the total 60 respondents 45% were Males and 55% were Females
- 41.7 % of the respondents were of Corporate experience of less than 5 years, 50% of 5-15 years and 8.3% of 15-25 years
- 75% of the respondents were from Human Resources and 25% from other functions

- 31.7% were from IT/ITES industry, 13.3% from Media/E-commerce, 10% from Research & Consultancy, 10% from BFSI, 8.3% from Healthcare &Government Organization and rest 26.7% from other industries
- Although TAT of 41.7% organization was highest, many organizations were having a longer TAT
- Respondents think that the traditional interview fails the most due to bias interviewers
- Artificial Intelligence was analyzed as one of the top trends in hiring
- 43.3% of respondents think AI as an innovation as their first impression of hearing AI
- Only 25% of the organizations used AI tools for recruiting, while 75% do not use any
- 55% of the respondents think CV screenings and 48% respondents think video interviews as the most useful innovations of AI
- 46.7% and 35% of the respondents think that implementation of AI tools would increase efficiency and productivity & reduce time and cost of predicting the best candidates
- 46.7% of the respondents think that there has been an average change in the quality of the candidate compared to the past three years
- 18.8% respondents think AI tools can be most useful in screening and engaging candidates
- 55% of the respondents think that AI has the potential to replace their job partially. While 21.7% think that it can or cannot replace their job
- In the next 5 years AI will decrease human intervention within workforce, according to 43.3% of the candidates
- 66.7% of the respondent's organizations do not conduct any EI test before hiring the candidate. While only 33.3% of them do
- A mixed response was seen as 46.8% of the respondents think that EI is a basic competency that develops early in life. While 32.3% think it has acquired skills & 21% think it has acquired knowledge
- 36.7% think that little emphasis should be put on EI during hiring a manager
- While hiring, EI should be conceptualized as a fit between the employee and its nature of work, think 68% of the respondents
- According to 85% of the respondents, EI increases as the grade of the employee increases
- Majority of the respondents i.e. 88.3%, think that a balance of AI & EI tools is important in the hiring process

# RECOMMENDATIONS

- The company should have a structured hiring process based on all grade levels
- Parameters should be set up, organization wide and according to their culture, competencies of existing employees and expected competencies, based on which algorithms should be formed and decisions should be taken accordingly
- Change should have value for time and money
- Being a product-based IT company, they can develop their in-house AI & EI tools

From the above recommendations, the company liked the suggestion of creating their own tools. Also, they were keen to know more about few tools in detail, especially Textio, Pymetrics and SixSeconds EI as they thought it could be a better match for their organization.

## **CONCLUSION**

We know that value comes from change and sometimes it's hard to make those changes realistic within the organization. What's worked in the past will not work for the future.

AI can perform the monotonous tasks quickly which would predict results in a better way. It can take over tasks like data collection, analyzing, interpretation, prediction etc. But as machines cannot be trusted for important decisions, human intervention would be necessary. AI will never be able to sympathize with a human. It would never be able to interpret the pain in someone's voice nor would be able to understand sarcasm that one portrays. Employees who can manage their emotions as well others emotions in order to achieve their target can be tested through EI tools.

Thus, the companies really need to rethink their strategies and technologies and alter the traditional hiring process. This change should take place by implementing a balance of Artificial Intelligence & Emotional Intelligence tools in acquiring the best fit for the organization.

AI would predict best talents for the required position but EI would conclude if the candidate is worth investing in or not. So, the companies should focus on selecting employees based on their behavior and traits which would portray their approach towards the work.

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# A Study on How Digital Payments have Revolutionized the Customer Experience

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# **Abstract**

This paper highlights the fact that India is increasingly demonstrating the acceptance of mobile-based payment methods as compared to their global counterparts. Payment through either cash or debit card, could pose a serious challenge to players in the digital payment industry. The traditional payments instruments like cash, cheques are major sources of hassle in terms of processing time, space, paper-related problems; which is why the technology appendix to payments has brought out a revolution. This study was carried out to understand the factors that affect customer satisfaction towards digital payments platforms; whether attractive offers lead the customers to shift from traditional payments to digital platforms and the relation between age and acceptance & usage of digital payments platforms.

Key words: Digital payments, customer satisfaction, age, usage, digital payment platforms.

# **INTRODUCTION**

As per the PricewaterhouseCooper's total retail survey report of 2015 FICCI-PwC (2016), respondents of the surveys in India are increasingly demonstrating their acceptance of mobilebased payment methods, compared to their global counterparts. A high percentage of respondents like to pay through either cash or debit card, the two of which are closely placed in terms of their preferences, at 66% and 67%, respectively, and this behaviour could pose a serious challenge to players in the digital payment industry. As observed by Mr. Meg Nakamura, cofounder and chief executive of Shift Payments that today, money exists in a variety of different forms, not just traditional fiat currency nonetheless there is no easy or convenient way for consumers to pay for everyday goods and services with these alternative stores of value. A shift is solving this problem with the support of i2c. The report also shows that the average debit card adoption and usage globally is rated at 57 percent, where India accounts for 67 percent of it and China transacts to over 35 percent. However, India's credit card consumption is still as low as 46 percent to as high as 62 percent of that of China. For Smartphone services consumption, both the countries stand equally at 25 percent to a global average of 12 percent. However, being major economies of Cash consumption; India still considers cash as safer method of payment than other alternatives, with usage rate of around of 66 percent in the country. The biggest catch of the report is that China accounts to around 71 percent of usage of digital platforms like mwallets, e-payment, etc., over India's meagre 22 percent. Moreover, the consumers prefer doing shopping and making payments not only by means of cash but also through other cashless

options like use of debit cards, credit cards, POS machines and online transactions (Singh et al., 2017). The northern region consumers have the highest percentage of young population (Tech2News, 2016). These consumers prefer wallets and online banking for shopping and booking movie ticket (Bhaskar, 2016)

### RESEARCH OBJECTIVES OF THE STUDY

- 1. To study the factors that affect customer satisfaction towards digital payments platforms.
- 2. To study whether attractive offers lead the customers to shift from traditional payments to digital platforms.
- 3. To Study the relation between age and usage of digital payments platforms.

## LITERATURE REVIEW

In the past few years, companies, organizations and enterprises across the world have experienced significant changes in their business information system. Huge investments did not work in information system, until they got magical "E" word in front of their business. Placing "E" is never ending story of success and rapid return for business. E-business, E-sales, Eprocurement, E-CRM, E-banking, E-payment, E-services are just a few sites Darbar (2018). Within the customer journey, specific phenomena require more attention, especially the phenomena of showrooming and webrooming. Forward-looking models are required to understand customer motivations throughout the journey. For instance, do customers believe that their shopping utility is enhanced when they search offline and finally buy online? What is really driving such consumer behavior? The use of mobile and touch devices and their impact on customer decisions require more attention and should be considered a fruitful area for research, Lemon & Verhouf (2016). In addition, the demographic factors play a significant role in the adoption of digital payments. The higher adoption of m-wallets increases the risk factor and security issues. This new technology creates a huge market share and makes faster growth by giving the consumers the ease of use and convenience (Manikandan and Jayakodi, 2017). A study by Singh and Rana (2017) supported the findings that the education level of the respondents significantly influences the intention to adopt m-wallets. D'souza and Bhadury (2017) provided a base for m-wallet companies to understand the average potential customer and its risk factors. It was observed that the possibility of the acceptance of digital payments is higher in metropolitan cities. Culture and economic factors play a significant role in the adoption of mwallets (Koksal, 2016). Lenhart and Horrigan (2003) point that as teenagers' use of digital wireless phones expands and they grow up to become the new generation with additional spending power, there is a great possibility that they will make cellphones their primary payment instrument and m-payments the dominant method of their payments.

According to Wang & Jiyan (2017) innovations also suggest that users would only need a payment gesture to replace traditional payment, random verification code input and other hasslefilled process; which not only frees mobile users from remembering a lot of numeric passwords

but also avoids potential hazards, such as password disclosure, forgotten, lost and illegal access. While Sriram (2018) sites important factors like usefulness ease of use, offers and cash back and service play a pivotal role in creating a conducive environment for adoption of mobile payment applications. Mobile application is becoming one of the easiest and fastest options for making payments.

Mobile payment (m-payment) refers to one type of electronic payment, performed through mobile devices, such as mobile phones, smartphones, and tablets. To ensure trust and avoid fraudulent situation, stringent security requirements must be imposed. In addition, interoperability coupled with privacy requirements, as well as speed of execution and ease-of-use are some mandatory requirements, too. From the end-users' point of view, the result of an mpayment transaction is just one transfer of money from customer to merchant. The heterogeneity of m-payment systems and economic models is an important challenge for their diffusion in the next years to come says Vatalaro (2016). The advantages of m-wallet are safety and ease of transactions. Moreover, for Consumer to Consumer (C2C) and Consumer to Business (C2B) transactions, there are remote and 10 The IUP Journal of Bank Management, Vol. XVIII, No. 1, 2019 contactless payment devices available in m-wallet. The role of m-wallet has increased in the business transactions due to changes in the needs of the customer, environment, demand of the business changes, etc. Despite the growth of FinTech, the understanding of the sector is still meagre. The services offered by FinTech differ widely but all share some commonalities states Baber (2016). A study by Singh et al. (2017) explored consumer preference of m-wallets for north India where a conceptual model named UTAUT model was used, with variables like ease of use, trust, security and hedonism, to investigate consumer behavior regarding m-wallets. Moreover, a survey conducted by Riquelme and Rios (2010) explored that north Indian consumers are thrilled to adopt new things and enjoy paying by means of m-wallets. A study by Bagla and Sancheti (2018) examined the popularity of digital payments in India and the sustainability challenges faced by m-wallet companies in India. They also explored the fact that there is an urgent need to improve the satisfaction level of customers related to security issues, cost of transactions, wide acceptability and interest on amount loaded.

The creation of a digital economy, especially in a developing country like India which is predominantly a cash economy with 98% of all its economic transactions done in cash, is easier said than done, MasterCard Advisors (2013) & Business Today(2016). However, the environment can best be described as just favourable as the chief drivers—increased smartphone penetration, booming e-commerce and expanding banking facilities—which are in place, are all positive indicators for the creation of a digital economy. Many Indian digital payment companies like Pay Through Mobile (PayTM) have ramped up their operations by adopting Quick Response (QR) codes in place of Point of Sale (PoS) machines that take longer time for completing a transaction and are pumping in heavy investments to meet the surge in digital payments triggered by the government's demonetization decision, Economic Times (2016).

## METHODOLOGY OF STUDY

The data for this study was collected from the consumers using digital payments across Mumbai city. The data collected was 107 both from online survey and administered questionnaire survey. The data collected was for three important performance measures, viz., customer satisfaction, shift from traditional payments to digital platforms and relation between age and usage of digital payments platforms. The analysis was conducted using statistical tool SPSS 25.0 version.

# **Hypotheses**

**Ho1:** There is no relationship between attractive offers and customer's shift to online platform from traditional platform of payments.

**Ha1:** There is a relationship between attractive offers and customer's shift to online platform form traditional platform.

**Ho2:** There is no difference between age and frequency of usage of digital payments.

**Ha2**: There is a difference between age and frequency of usage of digital payments.

## **DATA ANALYSIS**

# Reliability analysis of research

**Table 1** Reliability analysis

Cronbach's Alpha	No. of items	
.889	4	

To study reliability of the tool, Cronbach's alpha value was examined. From the Table 1 above, it is seen that the score for alpha is 0.889, suggesting the four items have relatively high internal frequency.

# The Profile of the Respondents

**Table 2:** Profile of Respondents

Re	spondents Profile	Frequency N= 107	Percentage (%)	
	less than 18 years	9	8.4	
Age	18 - 30 years	61	57	
Age	31 - 50 years	21	19.6	
	Above 50 years	16	15	
	Less than 200000	53	49.5	
Income	200001 - 500000	28	26.2	
meome	500001 -1500000	19	17.8	
	1500001 and above	7	6.5	

	SSC or lower	4	3.7
	HSC	10	9.3
Education	Graduate	60	56.1
Education -	Post Graduate	24	22.4
	Ph.D	1	0.9
	Professional	8	7.5

The respondents belonged to various areas of City of Mumbai, with 57 percent of respondents within age group of 18 to 30 years of age, 20 percent of people within age group of 31 to 50 years. Also, the annual income of respondents comes as having less than 2 lacs rupees (49.5%) and between 200001 to 5 lacs (26.2 %). The percentage of male respondents are 67 % and female respondents are 33%.

# Factors contributing to maximum satisfaction of respondents towards online platforms of payments

**Table 3:** Factor analysis amongst factors leading to shift and satisfaction over digital payments platform

Correlation	offers_as_fac tor_for_shift	Discounts_as_a_ factor_for_shift	Cashback_as_f actor_for_shift	Added_benefits_ coupons_as_facto r_for_shift
offers_as_factor_for_ shift	1	0.816	0.649	0.639
Discounts_as_a_facto r_for_shift	0.816	1	0.644	0.704
Cashback_as_factor_f or_shift	0.649	0.644	1	0.572
Added_benefits_coup ons_as_factor_for_shi ft	0.639	0.704	0.572	1

From Table 3 as analysed the factors like "attractive offers", along with "discounts" and "discounts" along with "Added benefits like coupons" make and bring maximum satisfaction amongst respondents, with values as 0.816 and 0.704 respectively.

Also, relevance and adequacy of data is justified by KMO value 0.814 (Table 4); which is higher than 0.6. Apart from these factors, certain ancillary factors were collected as Digital payments instigate quicker delivery of the products ordered online and hassle free delivery was also identified.

Table 4: KMO analysis and Bartlett's test

KMO and Bartlett's Test <sup>a</sup>			
Kaiser-Meyer-Olkin Measure of	of Sampling Adequacy	0.814	
Bartlett's Test of Sphericity Approx. Chi-Square 254.991			

df	6
Sig.	0.000

# Factors which lead to a Shift from Traditional Payments to Online Payments Platforms

**Table 5:** Communalities of the factors affecting shift from traditional to online payments options

Communalities	Initial	Extraction
offers_as_factor_for_shift	1.119	0.884
Discounts_as_a_factor_for_shift	1.183	0.979
Cashback_as_factor_for_shift	1.37	0.951
Added_benefits_coupons_as_factor_for_shift	1.269	0.893

Extraction: Principal Component analysis

**Table 6:** Total variances between the various factors

	Initial Eigen values <sup>a</sup>			values <sup>a</sup> Extraction Sums		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.707	75.019	75.019	3.707	75.019	75.019
2	0.579	11.727	86.746			
3	0.451	9.129	95.874			
4	0.204	4.126	100			

**Table 7**: Component Matrix for factors affecting shift

	Component 1
offers_as_factor_for_shift	0.889
Discounts_as_a_factor_for_shift	0.910
Cashback_as_factor_for_shift	0.833
Added_benefits_coupons_as_factor_for_shift	0.839

From Table 6, we see that Eigen value for the first factor (offers) is bit larger than Eigen value in the next factor (3.7 versus 0.57). Additionally, the first factor accounts to 75% of the total variance. This suggests that scale is unidimensional. Apart from that, the component matrix shows maximum acceptance of discounts and offers as major factors in shift from traditional to online payments, with values of 0.910 and 0.889 respectively.

Also in Table 9 below represents mean values for likelihood of acceptance of digital platforms over traditional platforms. The factors were weighed on a 5 point Likert scale, where values moving towards 4 are supposed to be attractive factors. So, offers form most attractive factor for a possible shift towards digital platforms from traditional platforms. Apart from that, when asked for offers making them shift from traditional to online, around 90.7 percent of respondents

replied as "yes" against a handful of "no" (9.3). So, we can reject null hypothesis and accept the alternate hypothesis as offers does make customers shift from traditional to online payments.

**Table 8:** Respondents finding attractive offers as factor to shift from traditional to online platforms for payments

Respondents	Frequency N=	Percentage	Valid Percentage	Cumulative
opinions	(107)	(%)	(%)	Percentage (%)
No	10	9.3	9.3	9.3
Yes	97	90.7	90.7	100

**Table 9:** Descriptive Statistics

Descriptive Statistics						
	N	Minimum	Maximum	Mean	Std. Deviation	Variance
offers_as_factor_for_shift	107	1	5	3.89	1.058	1.119
Discounts_as_a_factor_for_ shift	107	1	5	3.88	1.088	1.183
Cashback_as_factor_for_sh ift	107	1	5	3.68	1.17	1.37
Added_benefits_coupons_a s_factor_for_shift	107	1	5	3.64	1.126	1.269

# 3.5 The Relation between Age and Frequency of usage of Digital platforms

Table 10: Cross tabulation between Age and Frequency of usage of Digital Payments Platforms

		Daily	Once in a week	Once in a month	One in a Year
Less than 18 years	Count	3	2	4	0
	% within Age	33%	22.20%	44.40%	0.00%
	% within Frequency of usage	16.70%	4.40%	10.30%	0.00%
18 – 30 years	Count	12	26	20	3
	% within Age	19.70%	42.60%	32.80%	4.90%
	% within Frequency of usage	66.70%	57.80%	51.30%	60.00%
31 – 50 years	Count	2	7	11	1
	% within Age	9.50%	33.30%	52.40%	4.80%
	% within Frequency of usage	11.10%	15.60%	28.20%	20.00%
Above 50 - years -	Count	1	10	4	1
	% within Age	6.30%	62.50%	25.00%	6.30%
	% within Frequency of usage	5.60%	22.20%	10.30%	20.00%

From Table 11, it is seen that respondents in age group of "less than 18 years old" have a daily usage rate of 16.7 percent. Within age group of "18 – 30 years old", the frequency of usage is maximum on "daily" basis as 66.7 percent. While in age group of 31 to 50 years old, the maximum usage rate is once in a month: 28.2 percent. Further, frequency of usage amongst customers of age above 50 years was 22.5 percent, who did once in a week.

**Table 11:** Cross tabulation of income against frequency of usage of digital payments platforms

		Daily	Once in a week	Once in a month	One in a Year
Less 200000	Count	8	19	24	2
	% within Annual Income	15.10%	35.80%	45.30%	3.80%
	% within Frequency of usage	44.40%	42.2	61.50%	40.00%
200001- 500000	Count	2	14	10	2
	% within Annual Income	7.10%	50.00%	35.70%	7.10%
	% within Frequency of usage	11.10%	31.10%	25.60%	40.00%
500001 - 1500000	Count	7	6	5	1
	% within Annual Income	36.80%	31.60%	26.30%	5.30%
	% within Frequency of usage	38.90%	13.30%	12.80%	20.00%
1500001 and Above	Count	1	6	0	0
	% within Annual Income	14.30%	85.70%	0.00%	0.00%
	% within Frequency of usage	5.6%19	13.30%	0.00%	0.00%

From table 12, the respondents in income bracket of "less than 200000" have a frequency usage rate of 61.5 percent of "once in a month". It is seen in the income group of "200001 to 500000" that frequency usage is maximum once in a month at 26.5 percent. Further, in the income group 500001 – 1500000, the frequency usage rate is at 13.3 % once in a week and same is true for income group 1500001 and above.

### **CONCLUSION**

- 1. The study reveals that factors like "attractive offers" and "discounts" form the underlying elements of customer satisfaction, amongst many others.
- 2. Also, quicker delivery, as a result of choosing digital payments over traditional payments and hassle free delivery; are the other factors.
- 3. Attractive offers do lead to shift from traditional to online digital payments solutions (gateways).
- 4. Also, the demographics of 18 to 30 years of age form the best targets of influencers to attractive offers.
- 5. Apart from that, it was clearly found out that age and usage are independent of each other; thereby stating that the digital platforms is a success without hassle of age.

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# **Binge-Watching: Web-Series Addiction amongst Youth**

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#### **ABSTRACT**

With the evident change in the medium of consuming virtual content, the traditional watching content on the television sets has been reduced as people are now binge watching content on smaller screens (mobile phones, tablets), and this ease of availability has resulted in an addiction to keep viewing digital media content continuously causing numerous ill-effects. The purpose of this research was to find out the behaviour of youth towards virtual content and its effects on their wellbeing. The study is a cross-sectional survey of youth (18-25 years old). This research attempts to study the after-effects of binge-watching, and its being similar to any other addiction.

Keywords: Binge-watching, virtual content, web-series, addiction, digital media consumption

#### INTRODUCTION

With the changing time, the medium and methods of consuming virtual data has also seen a drastic change, going from scheduled television programs which were limited by accessibility to easily available repositories of seasons of shows accessible almost anywhere anytime by the viewers. This change was seen in the positive light initially, before discovering the hidden negative facets of 'binge-viewing' digital media content by the individual consumers. Binge-watching refers to the consumption of episodes one after the other in order to curb curiosity or just as an impulsive behaviour trait of the user- completing seasons of the web-series at one time.

Binge-watching is generally observed to be done for one of the few following reasons: 1. Production companies upload entire seasons at once to encourage such behaviours,

- 2. Web-series are structured with cliff-hangers at the end of every episode to keep the viewers engaged continuously, or
- 3. The viewers simply want to keep watching, many times as a substitute for healing emotional damages, or disturbances.

Such behaviour of binge-watching shows the addiction of viewers to virtual content that often leads to disturbances in their personal life whether it's displaying anti-social behaviours, increased emotional sensitivity or disrupted sleep-cycles leading to various health issues amongst the bingers, usually youth.

Youth of today is highly dependent on electronic devices for simple execution of basic chores, right from using calculators to designing art virtually, which ensures having their devices with them always. This over-dependence on devices makes it easier for them to fall prey to bingewatching and spiralling into the addiction of daily watching virtual content, whether online or offline.

This becomes similar to any addictive behaviour, which may result in the viewers feeling worse later but continuing despite that due to being able to escape reality for quite awhile.

# PROBLEM STATEMENT

Binge Watching- Web Series addiction amongst Youth

# **OBJECTIVES OF STUDY**

- To study behaviour of youth towards Web Series.
- To study the effects of binge watching on physical and mental wellbeing of youth.

#### REVIEW OF RELATED LITERATURE

The psychological and medical literature considers binge behaviour as an addiction (eg: Gold, Frost-Pineda, and Jacobs -2003) research which often shows that individual often engage in such activities to escape reality.

So what is binge watching? The Digital Democracy Survey defined the activity as "watching three or more episodes of a TV or web series in one sitting" (Deloitte 2015).

Rather than consuming one episode of a series each week in accordance with a typical television schedule, viewers may opt to view several episodes of a single series in immediate succession. Surveys have revealed that a majority of consumers prefer to watch multiple episodes of their favourite programs in a single sitting (Pomerantz 2013). A Nielsen (2013) study finds that 88% of Netflix users and 70% of Hulu Plus users reported watching at least three episodes of the same program in one day.

In addition to individuals consuming more content, they report doing so in a condensed period of time. According to a survey conducted by Netflix and Harris Interactive in 2013, 61% of adults who stream television shows at least once a week reported that they regularly engage in "binge watching" sessions that consist of two to three episodes of a single television series in one sitting, with nearly three-quarters of respondents having positive feelings about binge watching (Netflix 2013). In its 2014 Digital Democracy Survey, Deloitte reports that 31% of respondents engaged in binge watching at least once a week, with more than 40% of respondents age 14–25 engaging in the behaviour weekly (Deloitte 2015).

Binge watching has also helped advertisers to gather a customer base for them by selecting a target group based on the type of content they watch. The report has thus been generated from the data collected from *hulu.com* a service provider just like Netflix. A typical binge watcher is either inclined to watch the entire programme and switch to a new season/show or either the person is a situational binge watcher. The study also shows that people are less prone to watch online content in the morning or afternoon than compared with the night time or late fringe. In addition, people are more likely to break their habit of watching once the season or series end.

This report thus gives the conclusion that as the number of viewing programmes increases the tendency to binge watching also increase. Users are also hooked to use a single platform for their convenience, preference and also because of the hands set on the platform. Thus, even the platform uses this opportunity to advertise them with products and the production companies become keen to identify as well as differentiate the binge-watchers group from the non-bingers.

#### RESEARCH METHODOLOGY

Descriptive and exploratory research has been used in this research paper.

Tools: Qualitative data was collected for research purpose. Analysis was done by Questionnaire method.

Sample Size: 90

Sampling Method: Simple Random Sampling

Sampling Place: Mumbai

Statistical Technique Used: Chi Square test and Frequency Distribution Charts

#### **ANALYSIS & INTERPRETATION OF DATA**

# Chi Square test:

**Variables and measurement:** This hypothesis has two variables, namely – binge-watchers of virtual content and non-bingers, across three parameters viz. occupation, gender and age.

**Objective:** To find out whether a systematic association exists between demographic parameters implied to youth in study and binge-watching of the web-series content by them.

**Hypothesis:** Binge-watching or addiction to web-series is independent of occupation, gender and age.

From the parent hypothesis, we can formulate sub-hypothesis for each variable, where  $H_0$  denotes null hypothesis and  $H_1$  denotes alternative hypothesis.

# 1) Occupation

Here, we study whether the occupation of the youth, i.e. being a student or working professional affects their behaviour of binge-watching.

H<sub>0</sub>: Binge-watching the web-series is independent of nature of occupation (student or working professional)

H<sub>1</sub>: Binge-watching the web-series is dependent on nature of occupation (student or working professional)

Variables	Sub-hypothesis	Behaviour	P value	P>,<,= 0.05	Accept /
	(null)	studied			Reject
Occupation	H <sub>0</sub>	Binge-watching	0.0088	< 0.05	Rejected

# Result:

From the above table, we can prove the above mentioned sub-hypothesis. For  $H_0$ , if the p value < or = 0.05, then we reject the null hypothesis. Here, the p value is 0.0088 which is less, thus we reject the null hypothesis and accept the alternative hypothesis which states that 'Binge-watching the web-series is dependent on nature of occupation (student or working professional) in Mumbai'.

# 2) Gender

Here, we study whether the gender of the youth, i.e. being a female or a male, affects their behaviour of binge-watching.

H<sub>0</sub>: Binge-watching the web-series is independent of nature of gender

H<sub>1</sub>: Binge-watching the web-series is dependent on nature of gender

Variables	Sub-hypothesis	Behaviour	P value	P>,<,= 0.05	Accept /
	(null)	studied			Reject
Gender	$H_0$	Binge-watching	0.2657	>0.05	Accepted

#### Result:

From the above table, we can prove the above mentioned sub-hypothesis. For  $H_0$ , if the p value < or = 0.05, then we reject the null hypothesis. Here, the p value is 0.2657 which is >0.05, thus we accept the null hypothesis which states that 'Binge-watching the web-series is independent on nature of gender in Mumbai'.

#### **3) Age**

Here, we study whether the age of the youth, i.e. being in the age group of "18-21" or "22-25", affects their behaviour of binge-watching.

H<sub>0</sub>: Binge-watching the web-series is independent of nature of age

H<sub>1</sub>: Binge-watching the web-series is dependent on nature of age

Variables	Sub-hypothesis	Behaviour	P value	P>,<,= 0.05	Accept /
	(null)	studied			Reject
Age	$H_0$	Binge-watching	0.1988	>0.05	Accepted

From the above table, we can prove the above mentioned sub-hypothesis. For  $H_0$ , if the p value < or = 0.05, then we reject the null hypothesis. Here, the p value is 0.1988 which is >0.05, thus we accept the null hypothesis which states that 'Binge-watching the web-series is independent on nature of age in Mumbai'.

#### FINDINGS AND CONCLUSION

# **Findings:**

- The result mentions that 28% of students are binge-watchers while only 26% of working youth are binge-watchers, and their occupation has a significant level of impact on their decision to binge-watch.
- The results also mention that the decision to binge-watch is independent from other variables such as age and gender.
- About 95% of the respondents in the age group of 18-25 have admitted to watch webseries, with approximately 81% of them watching it online.
- 42% of the total viewers affirmed watching the web-series on a daily basis. The most preferred portals to watch these shows were rated to be: 1. Netflix, 2. Amazon Prime, and 3. Hotstar respectively, with the most preferred genre being comedy and horror.
- 58.9% of the viewers have reported being aware of their addiction to web-series consumption and 42.2% felt the need to stop binge-watching media.
- Respondents agreed to various ill-effects of this addiction, being similar to others, such as 43.21% reported repercussions on physical and mental health, 53% reported decline in productivity, 48.9% reported developing anti-social behavioural traits, 77.8% reported disturbances in sleeping-patterns.
- Although 75.6% of viewers reported feeling of satisfaction or a sense of high after bingewatching, there were 31.1% who said they felt more emotionally disturbed after consuming content due to this addiction

#### **Conclusion:**

Findings reveal that youth in Mumbai prefer binge-watching independent of their age group or gender, depending upon their work demands. They have been struggling with the addiction of digital media consumption and seem to be aware of it, and also would like to change their impulsive behaviour towards web-series consumption. The report highlights the negative impact

of binge-viewing on emotional, physical, psychological and social health of these young individuals.

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#### **APPENDIX**

# Questionnaire

#### **BASIC DATA**

1. Name, Age, Occupation (Student/ Working)

# **SCREENING DATA**

- 2. Do you watch web series/movies? (Yes, No)
- 3. Do you watch Online / Offline? (Online, Offline)
- 4. How often do you watch them? (Daily, Weekly, Monthly, Once in 3-6 months)
- 5. Which service portal do you use? (Amazon Prime, Netflix, Hotstar, Youtube, Other)
- 6. Which genre do you prefer?
  (Horror/Thriller,Comedy, Romantic/Rom-com, Drama, Action/Adventure, Classic, Other)

# ESTABLISHING ADDICTION & ITS AWARENESS

- 7. Are you a binge watcher? (Yes, No)
- 8. Are you aware of your addiction to binge watching? (Yes, No)

9. Do you feel the need to stop this addiction? (Yes, No)

# EFFECTS OF BINGE-WATCHING ON YOUTH

- 10. Does binge watching adversely affect your physical/mental health? (Yes, No)
- 11. Do you feel that continuously watching different content benefits you in the practical world?

(Yes, No)

- 12. Do you feel emotional turbulence (cranky) after binge watching a series? (Yes, No)
- 13. Does watching episodes back to back give you a feeling of satisfaction/happiness? (Yes, No)
- 14. Do you feel binge-watching lowers your productivity? (Yes, No)
- 15. Does binge-watching make you anti-social? (Avoiding family & friends get-together) (Yes, No)
- 16. Does binge-watching affect your sleep-cycles? (Less/Irregular sleep) (Yes, No)
- 17. Does binge-watching create lags in your work schedules? (Yes, No)
- 18. Do you feel guilty after binge-watching content and not being able to stop in-time? (Yes, No)

# Role of Work-Family Conflict on Job Satisfaction and Turnover Intention – A Study of Hospitality Employees

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# **ABSTRACT**

With the growing attraction of people towards Hospitality industry the demand for Quality of skilled workers in the Hospitality industry has tremendously increased. Hotels are looking for employees who can walk a mile extra to serve their customers. Often employees of the hotels have to work extended hours, even during public holidays and Sundays which would lead to work family conflict. The main objective of the study is to find the role of work family conflict on Job Satisfaction and turnover intention of the Hospitality employees. Structured Questionnaire was used to collect the data from the Hotel employees. SPSS-20 version was used to check Reliability of Questionnaire. Statistical tool Correlation and Regression was used for analysis. The Results reveal that Work family conflict does have a significant impact on both job satisfaction and turnover intention of the hospitality employees, the study provides valuable implications for the hospitality industry on the aspects of what organizations can do for their employees to prevent work family conflict.

*Keywords:* Work Family Conflict, Job satisfaction, Turnover Intention, Hotel employees, Hotel and catering industry.

#### INTRODUCTION

The Indian hospitality industry has emerged as one of the key industries driving the growth of the services sector and, thereby, the Indian economy. According to IBEF, the tourism & hospitality sector's direct contribution to GDP surged by 23.6% in 2017, raising the share of the industry (direct & indirect) was Rs 5.9 trillion (US\$ 91.3 billion)(Care Ratings, 2019). Indian hospitality sector falls within the spectrum of travel and tourism it mainly includes Food and service management, Bars, Nightclubs, Amusement parks, hotels, Motels, Hostels, Restaurants, Self-catering accommodation, Holiday centers and, Travel agents. This sector employs around 2.5million people and supports various other industries. This indicates that there is a growing demand of employment in this sector.

However studies shows that in the wake of globalization employees working in this industry are experiencing irregular working hours, long shifts, and incompatible work-family demands (Namasivayam and Zhao, 2007). Further with Increase in the trend among the food lovers trying to explore the food creating a food adventure and with the increase in the families visiting to the hotels these change in trend is visible in India. The employees of hotels or the catering industry as a whole are asked to do the duty beyond the working hours. Therefore keeping such

employees satisfied is not always easy since hotels are open 24 hours a day, 7 days a week; there are few 8-5 workdays, and few weekends off (Hoque, 1999a, b). This makes work–family conflict very evident with such set of employees.

While working and accomplishing all the different roles in one's personal life brings about stress for employees (Karatepe and Baddar, 2006; Karatepe and Sokmen, 2006). Horchler (1991) conducted a survey and found that only 36% of the respondents rated a job as the most important priority in their lives. This finding was echoed by the generation X'ers emphasis on quality of life.it means that employees feel that they do not have work life balance and to enjoy quality of life they would have to leave their job. A satisfied worker is more likely to be creative, flexible, innovative, and loyal (Ajmir, 2001) which is one of the key competencies in hospitality sector. Additionally there is evidence (Anderson et al., 2002) from the perspective of turnover intentions; employees tend to quit their jobs to eliminate the conflict if they cannot balance work and family. However such studies have been done in Western context and the samples were representing overall service sector.

The present study aims to understand the role of Work family conflict on Job satisfaction and turnover intentions of Hotel Employees in India.

# LITERATURE REVIEW

# **Work-family Conflict**

As early as 1960's researchers have stated studying the nexus between work and personal life (Pheron, 2007). Work-family balance is a state of equilibrium in which the demands of both a person's job and personal family life are equal (Kanter, 1977). Work-family balance means adjusting the pattern of work so that your employees can benefit from a better fit between their work and family life in long run hope to achieve sustainable development and profitability (Verma, 2007). The balance is achieved when an individual's right to a fulfilled life inside and outside paid work is accepted and respected as a room, to the mutual benefit of the individual business and society.

A growing aspiration to balance work with other aspects of life can doubtless be linked to the long hours that many individuals have to devote to work. It is acknowledged that UK organizations have contributed to this by encouraging a long hour's culture, to the extent that more than 20 per cent of the total workforce and a considerably higher proportion of managers and professionals work in excess of 48 hours a week (DTI, 2002). This culture is partly perceived to be the result of downsizing and the more demanding workloads with which those who remain in employment must contend (McGovern et al, 1998). There is good evidence to indicate that the intensity of work — reflected, among other things, in perceived workload — has increased in recent years, and that this increase in intensity has been greater in the UK than in other European countries (Green, 2001).

# **Job Satisfaction**

Locke and Lathan (1976) defined job satisfaction as pleasurable or positive emotional state resulting from the appraisal of one's job or job experience. Job satisfaction is a result of employees' perception of how well their job provides those things that are viewed as important. According to Luthans (1998), job satisfaction is an emotional response to a job situation, which can only be inferred, often determined by how well outcomes meet or exceed expectations. It represents several related attitudes which most important characteristics of a job about which people are have an effective response. Such characteristics include the work itself, pay, promotion opportunities, supervision and co-workers. Dissatisfied employees make organizations dysfunctional in businesses, damaging their financial performance. Such employees, when unattended, do not have loyalty towards their organizations and there for, making employees behave in a desired manner is extremely important for managers. "Job satisfaction is the amount of pleasure or contentment associated with a job.

Employee's happiness from their jobs critically depends on the duration of working hours. Organizations are social systems where human resources are the most important factors for effectiveness and efficiency and need effective managers and employees to achieve their objectives. Organizations cannot succeed without their personnel efforts and commitment. Job satisfaction is critical to retaining and attracting well-qualified personnel. Hence, organizations are regularly conducting job satisfaction surveys to understand how much employees are satisfied and what makes them satisfied.

#### **Turnover Intention**

Employee turnover is the movement of employees across organizations; jobs; labor markets etc. (Abassi & Hollman,2000). The term turnover is defined by Price (1977) as the ratio of the number of employees who have left during the period to the average number of employees in that organization during the period. Intent to stay/leave denotes to an employee's behavioral intentions and has been proved to exert a strong negative impact on actual turnover (Mueller etal.,1992). When the employees are not satisfied with their jobs and organizations do have not trust in their employees the employee's intention towards turn over will be greater, they will leave the organization and the duration of their job will be smaller (Jeffrey, 2007).

For the purposes of this study, turnover intention is defined as a conscious and deliberate willingness to leave the organization (Tett & Meyer, 1993). Intention to leave involves commitment of an employee, hence has its behavioral implications referred to turnover cognitions as mental decisions intervening between an individual's attitudes regarding the job and the stay or leave decision. Intention to leave can be considered as the extent of likelihood of an employee forfeiting his association in an organization (Currivan, 1999). Turnover intension of the employees is reduced when the expected benefits for the employee comes in the form of higher future earnings, increased job satisfaction and enrichment over one's lifetime and a greater appreciation of personal interests.

Worldwide researches have suggested that employee turnover is among the highest in the hospitality industry. Estimates of average annual employee turnover range from around 60 percent to 300 percent, according to research conducted by the American Hotel and Motel Association. Largely, high turnover rates will lead to higher cost of recruitment costs (Hinkin and Tracey, 2000; Hillmer et al, 2005), a reduction in organizations implicit knowledge base (Coff, 1997) and, as a result, the loss of competitive advantage.

# Work-family Conflict, Job Satisfaction and Turnover Intentions

Malik (2010) in his study suggests that work life balance had a major impact on job satisfaction, and it does affects the burnout level of the individuals it was found that the people who were able to manage the work and family responsibility were able to do justice to their job and also their burnout level was low and because of which they had high rate of job satisfaction which in turn had a lower level of turnover intention.

Leiva (2012) in his study suggested that work life Balance initiatives are considered as important antecedent of Job satisfaction. The findings of the study show Work family balance culture is more important and pleasant for the employees, rather than work life balance practices offered. They are main determinant of Job Satisfaction. It also states that WLB plays a major role in enhancing the organizational outcomes. When the employees are satisfied they are more productive (Leiva,2012). Burke (1988) also found that a higher level of work interfering with family was related to more psychological burnout and alienation and less job satisfaction in a sample of officers. Prior studies have reported that work interfering with family was negatively related to job satisfaction (Thomas & Ganster, 1995; Ayree et al, 1999; Anderson et al, 2002) and positively related to depression and health complaints among workers in service sector. Hence it can be hypothesized that:

H0: Work family Conflict is negatively related to Job satisfaction.

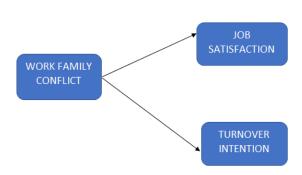
HA: Work family Conflict is significantly associated with Job Satisfaction.

Work-family conflict emerging from the work domain have been associated with higher rates of absenteeism (Burke and Greenglass, 1999; Anderson et al, 2002) and employee turnover (Blomme et al, 2008; Henly et al, 2006) among service sector employees. This holds true especially for females who have to balance more responsibilities as compared to their male counterparts (Walsh and Taylor, 2007). Additionally it has been suggested that the relationship between work and non-work may be even more important to young employees than it is to other groups of workers. It is argued that, as a cohort, young people wish to develop and manage their careers on their own terms, with an important part of this career individualism being the achievement of balance between the work and non-work aspects of their lives (Loughlin and Barling, 2001). This conclusion is supported by Lewis et al (2002) who, in a study of young peoples' values across four European countries including the UK, found evidence of a strong desire to lead a balanced lifestyle. Smola and Sutton (2002) concluded that younger people were less likely to feel that work should be an important part of life than those of the same age a generation earlier. Hence it can be hypothesized that:

H0: Work family Conflict is positively associated with Turnover Intention

HA: Work family Conflict is significantly associated with Turnover Intention

Figure 1 MODEL



# **METHODOLOGY**

#### **SAMPLE**

Total of 117 Employees from the Hospitality sector were approached out of which 76 responses were received. It states that response rate was 65% approximately

# **MEASURES**

The questionnaire used in the survey consisted of two sections. Section A gauges the demographic profile of the respondents while section B captures the Work family conflict, Job Satisfaction and Turnover Intention of the respondents.

Standardized scales were used to capture Work family Conflict (Netemeyer, Boles & Macmurrian, 1996), Job Satisfaction (Padma & Reddy, 2014) and Turnover Intention (Giffen 2015). Respondents were asked to rate their level of agreement on each statement from "1" as "strongly disagree" to "5" as "strongly agree". Survey was conducted with the help of Google forms. Data was then transferred to Excel wherein the overall scale sum was obtained by adding the items of each variable respectively.

Further secondary data was obtained through research journals, articles academic books, and various other reliable sources. the information was then observed and analyzed and taken into consideration

#### DATA ANALYSIS AND DISCUSSION

The Quantitative data collected was further analyzed using the SPSS 20-Version. To study the role of Work Family Conflict, on Job satisfaction and Turnover intention. The questionnaire was tested for its reliability. Later Correlation, Regressions Analysis were conducted.

Reliability: The reliability of the measures indicates the extent to which it is without bias or error free and hence ensures consistent measurement across time and across various items in the

instrument. In other words, reliability of a measure is an indication of stability and consistency with which the instrument measures the concept and helps to assess the "goodness" of a measure.

**Table 1: Reliability Statistics of variable** 

Variable	Cronbach's Alpha	No of Items
Work Family Conflict	0.862	5
Job Satisfaction	0.909	11
Turnover Intention	0.864	12

The above table shows the reliability of the three variables. The Cronbach alpha of three variable i.e. Work Family Conflict, Job Satisfaction and Turnover Intention for all the variables the Cronbach alpha is greater than 0.5 Hence the Questionnaire is reliable and can be used for further analysis.

Table 2: Scale Statistics of Variables									
Standard No of									
Variables	Mean	Variance	Deviation	items					
Work Family Conflict	10.68	16.859	4.106	5					
Job Satisfaction	33.59	31.631	9.572	11					
Turnover Intention	33.26	91.556	9.569	12					

Work family conflict is the Independent variable and Job satisfaction and turnover intention is Dependent variable. In order to study the relationship between the two Statistical tool such as Correlation and Regression was applied to all the three variables and the results are as follows:

**Correlation** is a mutual relationship or connection between two or more variables. In our study the variables are work family conflict, job satisfaction and Turnover intention. We can find out the relation between these variables.

Table 3: Correlation Between work-family Conflict and Job Satisfaction

Correlations								
		total JS	total WFC					
Pearson Correlation	total JS	1.000	290					
	total WFC	290	1.000					
Sig. (1-tailed)	total JS		.006					
	total WFC	.006						
N	total JS	76	76					
	total WFC	76	76					

The p value is negative 0.290 which is less than 0.05 therefore it confirms that H0 is accepted. Further Work-family conflict does have significance impact on job satisfaction.

**Table 4: Correlation Between work-family Conflict and Turnover Intention** 

	Correlations									
		total TOI	total WFC							
Pearson	total TOI	1.000	.355							
Correlation	total WFC	.355	1.000							
Sig. (1-tailed)	total TOI		.001							
	total WFC	.001								
N	total TOI	76	76							
	total WFC	76	76							

The p value is positive 0.355 which is less than 0.05 therefore it confirms that H0 is accepted. Further Work-family conflict does have significance impact Turnover.

# **Correlation Results**

The results of correlation confirm that work family conflict does not have significant relation with lower job satisfaction and increased turnover intention as the p value for both the variables are greater than the significance level. There exists a low positive correlation between both the dependent variables with respect to Independent variable.

**Regression:** A technique for determining the statistical relationship between two or more variables where a change in a dependent variable is associated with, and depends on, a change in one or more independent variables. In the study the Independent variable is Work-family Conflict and Dependent Variable is Job Satisfaction and Turnover intention.

Table 5: Regression between Work Family Conflict and Job Satisfaction

	Model Summary										
				Std. Error	or Change Statistics						
		R	Adjusted	of the	R Square F			Sig. F			
Model	R	Square	R Square	Estimate	Change	Change	df1	df2	Change		
1	.290a	.084	.072	9.223	.084	6.794	1	74	.011		
a. Predi	a. Predictors: (Constant), total WFC										

The value of Regression is .011 which is less than 0.05, H0 is accepted and It states that Work Family Conflict does leads to Lower level of Job satisfaction among the employees.

**Table 6: Regression Between Work Family Conflict and Turnover Intension** 

Model Summary										
Std. Error Change Statistics										
		R	Adjusted	of the	R Square	F			Sig. F	
Model	R	Square	R Square	Estimate	Change	Change	df1	df2	Change	

1	.355a	.126	.114	9.005	.126	10.677	1	74	.002	
a. Predi	a. Predictors: (Constant), total WFC									

The value of Regression is .002 which is less than the 0.05 H0 is accepted and It states that Work Family Conflict does increase Turnover Intention.

# **Regression Results**

The regression results approve that both the dependent variable i.e. Job Satisfaction and Turnover Intention does not have significant relation with the independent variable i.e. Workfamily Conflict as the p value in both the case is less than the significance level 0.05

#### **FINDINGS**

The key findings of the research were Even though there exist work family Conflict in the life of the employees working in Hospitality Industry, it does influence their level of Job Satisfaction employees in hospitality have lower level of job satisfaction due to long hours of working there is a check in time but no specific time for check out they mostly are required to extend their working hours it's a casual trend in this industry and also stressful work demands which is also the reason for turnover intention among the employees in this sector.

Work family conflict does disturb the psychological mind state of the employees and they think about switching the system in which they are working. Even for minor increment. Also results show the employees in this sector face high amount of day to day challenges in the workplace. The brand value of the organizations also plays an important role on the minds of the employees which enhances their level of Job Satisfaction and they feel good about their work. But the compensation strategy is very poor in this sector due to which employees intend to switch even for minor increment organizational support is least when it comes to managing work family life.

Summing up the overall findings of the research Work family Conflict does influence the mindset of the employees which further impacts the job satisfaction of the employee also due to stressful work environment lack of career growth employees turnover intention is higher

# **CONCLUSION**

The study wants to understand the role of work family conflict on the satisfaction level of employees and turnover intention in hospitality industry. Employees of Hospitality sector usually face a problem of Working for long extending hours even on the public holidays, Sundays to fulfill the demands of the customers and providing with the quality of the services has become very important and a culture in the hospitality and catering industry. Due to which employees are not able to fulfill their responsibilities of their family and life. Which give rise to conflicting situation which changes from cultural values of the individual's employees.

The major outcome of study shows that there is significant influence of the independent variable i.e. Work-family conflict on the dependent variables of the study that is job satisfaction and turnover intention.

It is evident from the statistical analysis that work family conflict negatively impacts the job satisfaction of the employees. Despite of the several other challenges faced in the Hospitality industry employees are happy with their job provided they are working with a well-known Brand. As the Brand value of the organization has an Important impact on the psychology of Employees morale are high with respect to the job that they are performing Also, When the work family conflict exists employees intent for change the case it is confirmed from the statistical results that work family conflict does increase the turnover intention. As employees in this industry strive to get better brands and growth in terms of compensation Higher amount of flexibility is expected out of the employees which impacts the life style of the employees.

In view of the growing interest to retain and attract skilled workers, this study provides valuable implications for the hospitality industry on the aspects of what organizations can do for their employees to prevent work family conflict. The most prevalent factor is to provide employees with good working environment and organizational support, Flexible working hours providing opportunities to spend more time with family so as to turn around their perception of their families "not having enough time-off-work". This is a significant as it provides insight for HR professionals to implement the policies in the Hotel. Lack of work family conflict helps employees for physical and psychological well-being. Which will enhance their productivity they will be glad coming to work and contributing for personal and organizational growth.

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# Impact of Digitisation on Efficiency of the Working Capital Finance Process & Financial Performance – A Study of Kotak Mahindra Bank Limited

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#### **ABSTRACT**

Kotak Mahindra Bank provides Working Capital Finance services to small businesses up to 7.5 crores. Currently, the WC Finance process has a turnaround time of thirty days on an average. The reduction in turnaround time can be achieved through digitalization of manual activities which consume excessive time in the funding process and help develop a competitive advantage. Thus, this study aims to identify such areas responsible for increased turnaround time which can be digitalized for the purpose of ultimate faster processing of Working Capital Finance. The study also tries to establish the effect of digitalisation in form of Electronic Payments Volume Growth including NEFT, RTGS and Mobile transactions on the various profitability, liquidity and efficiency ratios of the bank for the past five years. The unavailability of the digital application form, excess time consumption in the collection of documents and charges, duplication of work on the Loan Origination System and dispossession of certain solutions at the branch level itself were some of the findings. Digitalisation facilitates an increase in growth of advances but increases costs due to maintenance and other fixed costs. The study concludes that solutions like a Chatbot, an online form, faster approvals, LOS optimization can be incorporated to move further towards digitalization and deliver paramount services to dynamic customers. It was found that digitalisation does not reflect in profitability in short term and it may take time to deliver financial returns. The megatrends will shape up the Digital Transformation of the Banking Industry by the implementation of such suggested solutions.

**Key Words:** Working Capital Finance, Digitalisation, Turnaround time (TAT), Superior, Customer Service, Financial Performance.

# INTRODUCTION

The banking sector is the section of the economy devoted to the holding of financial assets for others, investing those financial assets as leverage to create more wealth and the regulation of those activities by government agencies. India's banking sector is a study in contrasts: it supports the world's fastest-growing large economy but is grappling with challenges that test its strength and resilience. The Indian government's twin thrusts—to encourage digital identification and cashless transactions—are driving change throughout the economy. The financial innovation in development and design the implementation of innovative financial process, in today's digital age and hyper-

connected environment require banks to re-imagine their business continuity. The year 2018 will be growth fuelled by innovative initiatives such as Unified Payments Interface (UPI) and technology.

# **Overview of Kotak Mahindra Bank Limited**

Established in 1985, the Kotak Mahindra group is one of India's leading financial services conglomerates. The Group offers a wide range of financial services that encompass every sphere of life. From commercial banking to stock broking, mutual funds, life insurance, and investment banking, the Group caters to the diverse financial needs of individuals and the corporate sector. The Group has a wide distribution network through branches and franchisees across India, and international offices in London, New York, Dubai, Abu Dhabi, Mauritius, and Singapore.

Kotak Mahindra Bank is an Indian **New Private Sector Bank** headquartered in Mumbai, Maharashtra, India. The private sector banks are split into two groups by financial regulators in India, old and new. The old private sector banks existed prior to the nationalization in 1968 and kept their independence because they were either too small or specialist to be included in nationalization. In 2016, it was the fourth largest private bank in India by market capitalization. (Wikipedia, Kotak Mahindra Bank Ltd., n.d.), (Kotak-Mahindra-Bank-Ltd, n.d.).

**Kotak Mahindra Bank Peer Comparison- Few Fundamentals** 

Name	Market Cap. (Rs. Cr.)	Net Interest Income	Net Profit	<b>Total Assets</b>
HDFC Bank	5,50,818.45	80,241.35	17,486.75	10,63,934.31
Kotak Mahindra	2,61,368.80	19,748.49	4,084.30	2,64,933.40
ICICI Bank	1,73,694.37	54,965.89	6,777.42	7,71,791.46
Axis Bank	1,31,915.26	45,780.31	275.68	6,91,329.57
Yes Bank	81,299.44	20,267.42	4,224.56	3,12,445.60

Figure 2: Kotak Mahindra Bank Peer Comparison- Few Fundamentals (Moneycontrol, 2018)

# **Working Capital Finance**

A working capital loan is a loan that has the purpose of financing the everyday operations of a company. Working capital loans are used to cover accounts payable, wages, etc. Companies that have high seasonality or cyclical sales cycles usually rely on working capital loans to help with periods of reduced business activity.

# **Products offered under Working Capital Finance**

# Fund Based1. Cash Credit 2. Bills Discounting 3. Working Capital Demand Loan 4. Overdraft 5. Term Loan 6. Export Finance (Pre Shipment/ Post Shipment)

# Scope:

The Scope of the project is confined to Kotak Mahindra Bank Limited and its digitalisation.

# **OBJECTIVES**

- a. To study the process of Working Capital funding from lead generation to disbursement and the current level of digitalisation.
- b. Devising ways to reduce the turnaround time by digitalizing processes to facilitate more convenience to KMBL and quicker, hassle-free service to customers.
- c. To study the effect of digitalisation on the financial performance of Kotak Mahindra Bank Limited with respect to a few Profitability, Liquidity and Efficiency ratios.

#### LITERATURE REVIEW

Egland et al. (1998) was the first study, which estimated the number of US banks offering Internet banking and analyzed the structure and performance characteristics of these banks. It found no evidence of major differences in the performance of the group of banks offering Internet banking activities compared to those that do not offer such services in terms of profitability, efficiency or credit quality. However, transactional Internet banks differed from other banks primarily by size.

**DeYoung** (2001a, 2001b, 2001c and 2005) analyzed systematically the financial performance of pure-play Internet banks in the U.S. The study found relatively lower profits at the Internet-only institutions than the branching banks, caused in part by high labor costs, low fee-based revenues, and difficulty in generating deposit funding. However, consistent with the standard Internet banking model, the results indicated that Internet-only banks grow faster than traditional branching banks. Internet-only banks have access to deeper scale economies than branching banks and, they are likely to become more financially competitive over time as they grow larger.

Sathye (2005) investigated the impact of the introduction of transactional Internet banking on the performance and risk profile of major credit unions in Australia. The Internet banking variable didn't show a significant association with the performance as well as with operating risk variable. Thus, Internet banking didn't prove to be a performance enhancing tool in the context of major credit unions in Australia. It neither reduced nor enhanced risk profile.

Malhotra P. et al. (2009) seeks to examine the impact of Internet banking on banks' performance and risk. The multiple regression results reveal that the profitability and offering of Internet banking do not have any significant association, on the other hand, Internet banking has a significant and negative association with the risk profile of the banks.

Harelimana J. (2018) a study on the role of electronic payment system on the financial performance of financial institutions in Rwanda: a case study of Equity Bank Ltd was carried out under the period from 2012 to 2016. Education and experience of the clients were found to significantly impact on electronic payment. There is, therefore, the need to design short training in the area of how to use a different way of access electronic payment different of clients of equity bank limited particularly those with a lower educational background as education is an important factor in accessing electronic payment system.

# RESEARCH METHODOLOGY

- **Data collection:** It was a Causal/ Conclusive research and secondary data was used for the project.
- **Source of the data collected:** The required data was sourced from the database and existing documents with Kotak Mahindra Bank Limited including the current process flow of Working Capital Finance. Data was also collected from a few websites, company annual reports, Articles, RBI website and Database on Indian Economy.
- **Sample and Sample size:** The sample size was 1 that is Kotak Mahindra Bank Limited. (Electronic payments growth year on year and profitability, liquidity and efficiency ratios for five years from 2013 to 2017 respectively).
- **Data analysis technique:** The project focused on identification and digitalization of processes so the data was qualitative (non-metric) partly. **Inferential** statistics that is **parametric tests** were used, **correlation**, as well as linear regression tests, were performed. Electronic Payments Growth was the independent variable. All the statistical computations were performed using SPSS.

**Hypotheses:** (EPG- Electronic Payments Growth)

# **Profitability**

i. **Ho**: There is no statistically significant positive correlation between Profitability ratios and EPG.

**Ha**: There is a statistically significant positive correlation between Profitability ratios and EPG

ii. **Ho:** There is no statistically significant prediction of Net Interest Margin by EPG.

**Ha:** There is a statistically significant prediction of Net Interest Margin by EPG.

iii. **Ho:** There is no statistically significant prediction of Return on Asset by EPG.

**Ha:** There is a statistically significant prediction of Return on Asset by EPG.

iv. **Ho:** There is no statistically significant prediction of Advances Growth by EPG.

**Ha:** There is a statistically significant prediction of Advances Growth by EPG.

Similarly, the hypotheses are for Liquidity (Current Ratio, Capital Adequacy Ratio) and Efficiency (Cost to Income Ratio, Intermediation and Operating Costs to Total Assets) Ratios.

# **Description of the Variables**

**Working Capital Finance:** Working Capital Finance is a loan provided to Small and Medium Enterprises to fulfill their short-term obligations.

**Digital Banking:** Digital banking is the move to online banking where banking services are delivered over the internet. The advantages for banks and customers are providing more convenient and faster banking services.

**Electronic Payments Volume Growth:** This refers to the growth in the volume of banking payment transactions performed by the users. These transactions only involve the NEFT, RTGS

and Mobile Transactions taken as an average for a year and growth in terms of percentage year on year increase is considered.

# **Profitability Ratios**

# • Net Interest Margin

Net interest margin (NIM) is a measure of the difference between the interest income generated by banks or financial institutions and the amount of interest paid out to their lenders.

#### Return on Assets

Return on assets (ROA) is an indicator of how profitable a company is relative to its total assets. ROA gives an idea as to how efficient a firm's management is at utilising assets to generate earnings.

# • Advances Growth

Advances Growth refer to the year on year percentage growth in Advances or loans provided by the bank.

# **Liquidity Ratios**

# • Capital Adequacy Ratio

Capital Adequacy Ratio (CAR) is also known as Capital to Risk (Weighted) Assets Ratio (CRAR), is the ratio of a bank's capital to its risk.

# • Current Ratio

The current ratio is a liquidity ratio that measures a company's ability to pay short-term and long-term obligations. The current ratio considers the current total assets of a company relative to that company's current total liabilities.

# **Efficiency Ratios**

# • The cost to Income Ratio

It shows a company's costs in relation to its income. To get the ratio, divide the operating costs (administrative and fixed costs, such as salaries and property expenses, but not bad debts that have been written off) by operating income.

# • Intermediation cost to Total Assets Ratio

The ratio of intermediation cost to total assets is a ratio of operating expenses relative to the total assets and is an indicator of efficiency.

# • Operating costs to Total Assets Ratio

Operating costs to Total Assets Ratio is more of an indicator of a bank's business efficiency rather than a basis for detailed cost analysis.

# DATA ANALYSIS AND INTERPRETATION

# A study on the effect of digitalisation on financial performance of KMBL, with respect to profitability, liquidity and efficiency ratios

\*Electronic Payments Volume Growth Includes NEFT, RTGS and Mobile Transactions average only for the years.

Source: (RBI, Database on Indian Economy, n.d.) (RBI, Payments and Settlement Systems, n.d.)

The table shows the ratios of Profitability, Liquidity, and Efficiency of Kotak Mahindra Bank Limited for the past five years that is from 2013 to 2017. These ratios are the dependent variables for the study. The table also shows the Volume Growth in Electronic Payments year on year from 2013 to 2017 and includes an average of the total NEFT, RTGS and Mobile Transactions volumes for those years respectively of Kotak Mahindra Bank Limited.

KMBL	PR(	<b>)FITABI</b>	LITY	LIQUID	OITY		<b>EFFICIENCY</b>		Electron
Year	Net Interes t Margi n (%)	Retur n on Assets	Advance s Growth (%)	Capital Adequac y Ratio	Curr ent Ratio	Cost-to- Income Ratio (%)	Intermediati on cost to Total Assets Ratio	Operati ng costs to Assets Ratio	ic Payment s Volume Growth* (%)
2013	4.6	1.81	8.5	16.05	0.5	51	2.96	2.43	20.45
2014	4.9	1.8	9.4	18.83	0.59	50	2.97	2.62	43.47
2015	4.9	1.98	24.8	17.17	0.4	52	3.36	2.85	69.16
2016	4.3	1.19	79.4	16.34	1.14	58	3.67	3.07	79.57
2017	4.5	1.73	14.7	16.77	1.1	48	2.76	2.9	78.47
Averag e	4.64	1.7	27.36	17.03	0.75	51.8	3.14	2.77	58.22

	R	Constant	Electronic	Sig.	
	Square	Constant	<b>Payments Growth</b>		
Net Interest Margin	12.80%	4.852	-0.004	0.554	
Return on Assets	17.40%	1.986	-0.005	0.485	
Advances Growth	34.80%	-12.581	0.686	0.295	
Capital Adequacy Ratio	0.50%	17.209	-0.003	0.909	
Current Ratio	42.90%	0.228	0.009	0.23	
Cost to income Ratio	8.80%	49.268	0.043	0.629	
Intermediation costs to Total Assets Ratio	16.70%	2.805	0.006	0.494	
Operating Costs to Total Assets Ratio	94.30%	2.221	0.009	0.006	

#### SUMMARY OF FINDINGS AND SUGGESTIONS

# **Working Capital Finance Process**

The identified areas where digitalization can be implemented are:

1. The communication or interaction step between the Branch RM and Working Capital BRM can be digitalized through an instant channel. Also, every branch RM should be provided with basic information regarding products and eligibility so he can interact with the customer and he can input his requirements so that customer does not have to wait until WC RM attends him and the process time is reduced. (Refer Annexure II) Simple mobile devices will also help RMs for viewing assigned leads, search leads, schedule tasks, follow-ups, and view pending items, alerts, and notifications. The step where the BRM collects the photocopies of the documents can be digitalized by uploading scanned

- copies of the documents with imaging technology, immediately to the teams instead of the teams waiting to receive the physical copies of documents.
- 2. The Credit TAT can be reduced if documents are uploaded on LOS by the BRM at the beginning of the process simultaneously with providing physical copies. Also, Approving Authorities can approve the cases on LOS along with emails and allow for further processing. Queries of Credit team should be discussed in the personal meeting with the client itself. Operations RCAD team can raise queries simultaneously with Credit team for faster generation of RFD.
- 3. A mobile application can be created for Working Capital Finance or it can be incorporated into the Kotak Banking app as well. Chatbots can be utilized for responding to any queries and provide solutions to customers for FAQs while application filling. Digital tracking system for customers as well as the bank should be used to know at what stage is the application currently.

# Effect of Digitalisation On Financial Performance of KMBL

- **1. Profitability** The profitability ratios of Net Interest Margin (NIM), Return on Assets (ROA) are negatively correlated and Advances Growth is positively correlated with Electronic Payments Growth but is not statistically significant. Therefore, the null hypothesis is accepted and the alternate hypothesis is rejected. The Net Interest Margin, Return on Assets & Advances Growth ratio regressions are not statistically significant. Therefore, the null hypothesis is accepted and the alternate hypothesis is rejected.
- **2. Liquidity** The liquidity ratio of Capital Adequacy Ratio is negatively correlated and the Current ratio is comparatively positively correlated with Electronic Payments Growth but not statistically significant. Therefore, the null hypothesis is accepted and the alternate hypothesis is rejected. The Capital Adequacy Ratio and Current Ratio regressions are not statistically significant. Therefore, the null hypothesis is accepted and the alternate hypothesis is rejected.
- **3. Efficiency** The efficiency ratios of Cost to Income ratio, Intermediation cost to Total Assets ratio and Operating Costs To Total Assets ratio (statistically significant) are positively correlated with Electronic Payments Growth. Therefore, the null hypothesis is rejected and the alternate hypothesis is accepted (for Operating Costs To Total Assets ratio). The Cost to Income Ratio and Intermediation cost to Total Assets ratio regressions are not statistically significant, but the regression of Operating costs to Total Assets is statistically significant. Therefore, the null hypothesis is accepted and the alternate hypothesis is rejected. The null hypothesis of Operating Costs to Total Assets ratio is rejected and the alternate hypothesis is accepted.

#### **CONCLUSION**

Digitalization in Banking is the need of the hour amidst the cut-throat competition in this industry and the changing expectations of the imminent generation of customers. The effect of

digitalization is negative on profitability and it may lead to a decrease in the profitability of KMBL though the Advances grow. This may be due to the higher cost of operations, including fixed cost and labor cost, which is consistent with some studies that were reviewed. The effect of digitalization on liquidity is positive as it improves the liquidity position of KMBL by freeing up working capital. The effect of digitalization on efficiency is negative as it increases the operating costs of the bank due to adaption pressures and regulatory restrictions, integration costs associated, resistance to change from society, and complex data architecture. However, the returns on digitalization of banks take time to deliver desired results due to high initial investments and maintenance costs. The effect of digitalization can be also studied through levels of customer satisfaction. Digitalization will play a huge role to accomplish this with the digital megatrends of BigData, BlockChain, Cloud Computing, Smartphones, Analytics, Artificial Intelligence and Robotics changing the face of Banks, leading the Global Banking Industry and the Customers towards transformation nto a Digital Space.

# SUGGESTIONS FOR FURTHER STUDY

- 1. A study on the levels of digitalization of processes at other private sector banks in India and abroad can be carried out and a comparison can be made to understand the industry levels compared with KMBL and developing strategies accordingly, as it was not possible in this report due to time constraints.
- 2. Research and applicability of BlockChain, BigData Analytics, Smartphones and Artifical Intelligence and solutions in form of software or core banking systems can be explored for providing enhanced services to customers.
- 3. To study the effect of digitalization a peer comparison of either private and public or only private banks of impact on financial performance can be carried out for a comparative study. The effect of digitalization can be studied on various other financial ratios and can be carried out on customer satisfaction and other non-financial parameters for further study.

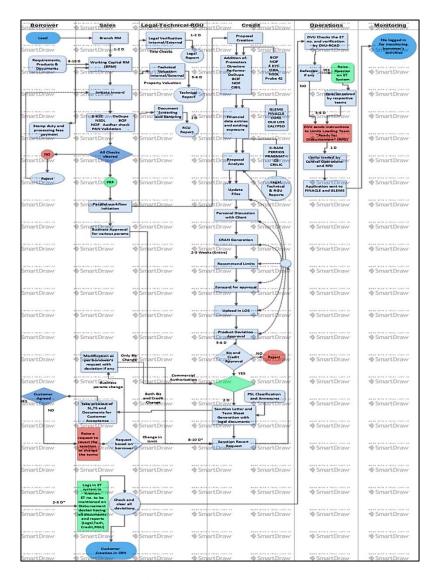
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#### **ANNEXURE**

I. Working Capital Process Flow



II. Information to be captured by Branch RM

The following basic information should be captured by the Branch RM when the customer first approaches him instead of asking the WC RM to meet the customer again and capturing these details. This would facilitate faster processing of the loan and the bank can start analyzing whether the customer can be provided the funding and if he is eligible for the same.

SN	Information To Be Captured By The Branch Rm
1	Name of the borrower, age and his company type(private, public, partnership), history,
1	date of incorporation.
2	Purpose of the loan.
3	Working Capital Finance facility required (type).
4	Amount of loan required.
5	Tenure of the loan.
	Business profile including- details about the sector the business operates in, business
6	model, the core business, net profit margins, revenue/turnover, working capital cycle
	days, partners, promoters, directors, Import/Export details if any.
7	Residential and office address proof.

8	Details about the collateral offered- Type (Residential/Commercial/Industrial), its value
0	as per the customer.
9	CIBIL score.
10	Existing loan details if any including bank name(s).
11	Current A/c balance(s) and bank name(s).
12	Future business plans/ expansion plans.
13	ITR details.

# Determinants of the Usage intentions towards Mobile Wallets: An Empirical Study

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# **ABSTRACT**

Mobile wallet is one of the new paradigms that is transforming the payments in India. The segment is growing due to growing online transactions, rising trend towards mobile banking, and ease of usage of mobile wallet applications. The research paper is an attempt to explore this emerging trend and to investigate the factors affecting the usage of mobile wallets and aim to build an empirical model using Technology Acceptance Model. A random sample of 300 respondents is collected using non-probability sampling method. The Structural Equation Modelling puts forward three determinants of attitude towards mobile wallets namely, Perceived Usefulness, Perceived Ease of Use and Trust. Further, attitude towards mobile wallets has been found to influence usage intentions. The research will be helpful to the academicians and corporate professionals.

Keywords: Mobile Wallets, M-commerce, Paytm, Consumer adoption

# **INTRODUCTION**

The digital transformation across different business and organization activities revolutionised the traditional payment methods and enabling the way towards cash-less economy. The Indian digital payment industry is set to reach \$500 billion by 2020 as per the report published by Google & Boston Consulting Group (Digital Payments, 2020). The growth in digital payment is led by the exponential growth in mobile-wallets (m-wallets). The m-wallets industry is estimated to grow at a compound annual growth rate (CAGR) of 148 percent over next five years and will be \$4.4 billion by 2022 (Capgemini's World Payment Report, 2018). Some of the drivers of this exponential growth can be attributed to convenience to pay, availability of lucrative offers, the increased smartphone penetration and huge internet user base with over 300 million users wherein 50 percent using internet through mobile only. Also, the increased focus of Government of India has further enabled the growth of mobile wallets in India. Among the various mobile-wallet players, Paytm continues to dominate the market with over 200 million users while, other players such as FreeCharge and Mobikwik continue to grow.

M-wallet is a subset of mobile commerce and can be defined as a payments or commercial transactions using mobile communication technologies. Mobile wallet is a digital wallet wherein a user can make payments through smartphones, tablets, phablets etc. from any location

at any time towards mobile recharge, ticket booking, bill payments, utility payments, e-commerce transactions and money transfers etc. Mobile wallet is one of the most successful business concept that has already surpassed credit cards in terms of the number of users in just a fraction of time. Thus, the sector of mobile-wallets is a one of the most contemporary study areas in the area of digital transformation of business and warrants an in-depth research.

Theoretically, the acceptance of any new technology can examined using Technology Acceptance Model (TAM) (Davis, Bagozzi & Warshaw 1989) which explains the user behaviour. It is one of the most popular model to predict both as the use information technology and intention to use (Lu et al., 2003). TAM was based on its parsimony and predictive power thus it is easier to apply in different emerging technologies like mobile wallets (Venkatesh and Morris, 2000). Although, technology acceptance has been researched, there is comparatively lesser empirical evidence and research in field of mobile wallets specifically (Amin, 2009). Thus current research motivates to investigate the area of mobile wallets with respect to the consumer adoption. The paper aims to develop an empirical model terms of determinants of consumer usage intentions towards mobile wallets. The research paper is organised into sections viz. literature review and theoretical framework, research model, research methodology, data analysis followed by discussion, conclusion and scope for further research.

#### LITERATURE REVIEW AND THEORETICAL FRAMEWORK

A study of consumer adoption of Mobile wallets (M-wallets) / mobile payments can be examined from the theoretical foundation of technology adoption viz. adoption of mobile technology, m-commerce, and information technology at large. Thus, the current study of consumer usage intentions towards mobile wallets is constructed using TAM as a base model. TAM is an adaptation of Theory of Reasoned Action (TRA) which was proposed by Fishben & Ajzen (1980). TRA puts forward the factors impacting behavioural intentions in general while TAM is specific with respect to behavioural intentions towards use of information technology (Davis et al. 1989, Cheong and Park, 2005; Chiu et al., 2005; Ramayah et al., 2003; Venkatesh & Morris, 2000) thus, can be best suitable for the adoption of mobile wallets (Amin, 2009; Cheong and Park, 2005). TAM is formulated to analyse the effect of external factors on the attitude formation and behavioural intentions with regards to computer technology. As the new technologies like mobile wallets are complex and uncertain in terms of adoption, people form attitudes and intentions towards trying to use before actual usage. The Technology Acceptance Model puts forward four constructs namely, perceived ease of use (PEOU), perceived usefulness (PU), attitude (Att) and usage intentions (UI) (Davis et. al, 1989). The current paper has hypothesized the research model using these constructs.

# **Perceived Ease of Use (PEOU)**

Perceived Ease of Use (PEOU) refers to the degree to which the prospective user believes that a particular technology would be easy to use and therefore free of physical and mental efforts thus influencing usage intentions (Chau, 1996; Venkatesh & Davis, 2000). Mobile wallets help the consumer become more independent by giving them the liberty to roam around cashless thus

also boosting reduction in thefts. (Dennehy & Sammon, 2015). Likewise, if potential users perceive m-wallets easy to use, they would evaluate m-wallets positively which in turn would enhance their usage intentions. Thus,

H1: Perceived Ease of Use will influence attitude towards mobile wallets

# Perceived Usefulness (PU)

Perceived Usefulness (PU) refers to the degree to which an individual believes the adoption of the new system (m-wallet in this case) will enhance his/ her productivity and help him in attain his performance related goals. PU is determinant usage intentions (BI) with respect to the technology (Chau and Hu, 2001). PU in this context, can be termed as the extent to which people consider m-wallets being useful as payment gateway as compared to other modes of payment. Such perceived usefulness will would influence users' evaluation of the technology and thus, would lead to enhanced usage intentions. Thus,

H2: Perceived Usefulness will influence attitude towards mobile wallets

#### Trust (T)

Trust is an "indicator of a positive belief about the perceived reliability of, dependability of and confidence in a person, object or process" (Fogg and Tseng, 1999). One of the major concerns of accepting e-commerce, m-commerce and mobile payment has been the security and privacy of the people's personal data. As m-wallet uses mobile service networks which are sensitive to hacking and viruses; people might be apprehensive about sharing their bank details or credit card details on mobile phones. Also they tend to be sceptical about location based services that collect data and provide location based discounts, coupons and offers. Security and privacy concerns of the people would be some of the major hindering factors for behaviour intentions. If the user trusts the services of the mobile payments in terms of the reliability and dependability that their information is safe and secure and will not be shared then the chances of users adopting the technology will be high. Trust has been presented as inclusive of security and privacy and has been found to have a positive impact on behavioural intentions with respect to mobile services (Kaasinen, 2005, Amoroso D. and Magnier-Watanabe R, 2012).

H3: Trust influences attitude towards mobile wallets

#### Attitude (Att)

Attitude refers to the feelings, evaluation of a product/ brand/ individual. Attitude is a predictor of one's behaviour intentions (Fishbein & Ajzen, 1981). Hence, in context mobile wallets, a positive evaluation of mobile wallets would lead to users' intentions to adopt the technology H4: Attitude towards mobile wallets would influence usage intentions

# **Usage Intentions (UI)**

UI refers to the degree to which a person forms conscious intentions to perform a specified behaviour. The research aims to explore the behavioural intentions in terms of potential usage intentions towards mobile wallets which in turn would predict actual usage. (Davis et al., 1989, Venkatesh and Davis, 2000). Ajzen & Fishbein (1980) states have identified that for a consumer to practically use a product or service is influenced by behavioural intention.

# **Hypothesized Research Model**

Proposed model for the current research includes four constructs Perceived Usefulness (PU), Perceived Ease of Use (PEOU), and Trust which determines the attitude (Att) towards Mobile Wallets which mediates the effect on Usage Intentions (UI).

#### **OBJECTIVES OF THE STUDY**

The present study is undertaken to assess the determinants of the usage intentions towards mobile wallets in India. The objective of the study is hypothesize theoretically grounded model and empirically validating the same.

#### RESEARCH METHODOLOGY

The present research is a quantitative study to build a model with reference to usage intentions towards mobile wallets in India. The study has used Survey design, thus the primary data is collected using a structured questionnaire. The constructs used in the questionnaire have been grounded in the literature and the item statements are adapted to suit the Indian context and mobile wallets. All five constructs are measured on Likert Scale (1-5 wherein 1=strongly disagree to 5= strongly agree). The item statements were adapted from prior studies (Amin, 2009) which are described as follows: perceived usefulness (Pikkarainen et al., 2004; Wang et al., 2003; and Davis, 1989), perceived ease of use (Nysveen et al., 2005; Wang et al., 2003), Trust and attitude (Wang et al., 2003) and usage intentions (Shimp and Kavas, 1984). The research instrument is pretested to establish content validity using a focus group discussion among the learned faculty colleagues. Based on the results, the questionnaire was then utilised to collect primary data. The questionnaire is prepared using Google Forms and has been shared via emails, messages and through social media platforms such as Whatsapp, Facebook etc. to the respondents. Thus, the study has deployed a non-probability sampling technique, with all individuals residing in the city of Mumbai can be a sampling unit. Total 300 responses have been collected and analysed for the study.

# **DATA ANALYSIS & DISCUSSION**

The primary data is analysed using SPSS 21.0 & AMOS 23.0. The demographic composition of the data as represented in the Table No. 1. The data has been analysed using Confirmatory Factor Analysis (CFA) as a precursor to the path analysis and to assess the reliability and validity of the constructs. The reliability is assessed using Composite Reliability. The Table No. 2 demonstrates the reliability of all constructs as the values are well above the accepted norms of 0.70 (Nunnally, 1978). The construct validity including convergent and discriminant validity is examined using Fornell & Lacker (1981). As all the factor loading as shown in Table No. 3 is above the 0.6 and the Average Variance Extracted (AVE) of all constructs is above 0.5, the constructs demonstrate convergent validity. Further, the square-root of AVE (diagonal elements)

is higher than the inter-construct correlations (off-diagonal values in the Table no.4), the discriminant validity is effectively established. Thus, the results of Confirmatory Factor Analysis is good enough to proceed for the path analysis.

The results of path analysis show that all directional hypotheses are significant 99% confidence level except the effect of PU to PEOU which is significant at 95% confidence level. Hence, it can be postulated that all the directional hypotheses are accepted at 95% confidence level. Further, the regression coefficients (as shown in Table No.5) explain the effect of each variable on the usage intentions. The p-value (<0.05) of the regression coefficients as shown in Table No 5 show significance of all directional hypotheses. It has been found that PEOU, PU and Trust determine attitude which in turn influences UI. It can also be observed that attitude has the highest impact on the usage intentions with robust t-value. Similarly, Trust has come out as the most significant determinant of attitude towards mobile wallets. The Goodness-of-fit indices as shown in Table No. 6 also validate the empirical validation of the hypothesized model. The Goodness of Fit indices such as CMIN/DF is 2.888, RMR is 0.044, GFI is 0.907, AGFI is 0.866, CFI is 0.956 and RMSEA is 0.079. All the indices are well-above the accepted norms (Hair et al, 2010; Hu & Bentler, 1999).

Thus, the present study puts forward an empirical model in context of usage intentions of mobile wallets in India. Perceived Ease of Use, Perceived Usefulness and Trust in the technology influence the attitude towards mobile wallets which in turn impacts the usage intentions of the consumers.

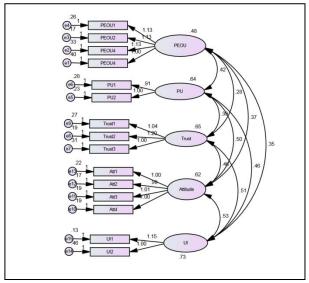
**Table no. 1: Demographic Details** 

	Details	Frequencies	Percentage
Candan	Male	156	52
Gender	Female	144	48
	Below 18 years	8	2.7
Age	18-25 years	143	47.7
Group	25-40 years	117	39
_	Above 40 years	32	10.7
	Below 5 Lacs	84	28
Incomo	5 Lacs & Above - Below 10 Lacs	86	28.7
Income	10 Lacs & Above - Below 15 Lacs	66	22
	15 Lacs & Above	64	21.3

Table No 2: Reliability coefficients for each construct

Construct	No. of Items	Cronbach Alpha
Perceived Usefulness (PU)	2	0.819
Perceived Ease of Use (PEOU)	4	0.888
Trust	2	0.895
Attitude	4	0.927
Usage Intentions	3	0.847

**Figure 1: Confirmatory Factor Analysis** 



**Table No. 3: - Factor Loadings** 

Item	Item Statements			
PEOU4	It would be easy for me to become skillful at using mobile wallets	0.74		
PEOU3	I find mobile payment flexible to interact with	0.806		
PEOU2	Interface of mobile wallets is easy to operate	0.886		
PEOU1	Learning mobile wallets is easy for me	0.839		
PU2	Using mobile wallets would enhance my effectiveness in conducting payment transactions	0.857		
PU1	M-wallet enable to pay quickly	0.81		
TRUST3	Mobile wallets is secure to use	0.824		
TRUST2	I trust ability of mobile wallets to protect my privacy	0.912		
TRUST1	I believe mobile wallets system to be trustworthy	0.852		
ATT4	My overall evaluation of mobile wallets is positive	0.873		
ATT3	I enjoy the hassle free way of payment through m-wallets	0.877		
ATT2	I liked the concept of m-wallets	0.884		
ATT1	Using mobile wallets is beneficial	0.858		
UI2	If at merchant's place, I intend to use mobile wallets	0.783		
UI1	My general intention to use mobile wallets is very high	0.938		

Table No. 4 - Assessing Convergent and Discriminant Validity

	PEOU	PU	Trust	Attitude	UI	AVE	CR
PEOU	0.8195					0.6715	0.8906
PU	0.748	0.8338				0.6953	0.8201

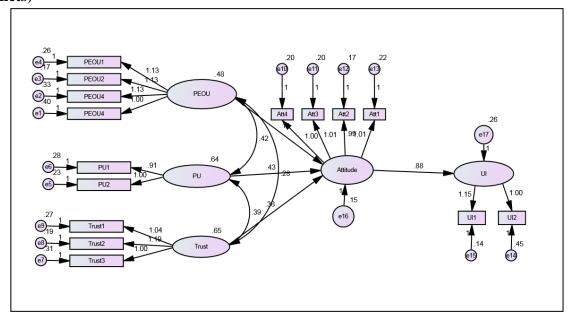
Trust	0.496	0.605	0.8634			0.7455	0.8977
Attitude	0.68	0.793	0.717	0.8731		0.7622	0.9276
UI	0.593	0.676	0.742	0.782	0.864	0.7465	0.8538

Note: Diagonal values are the square-roots of AVE and off-diagonal values are interconstruct correlations

AVE: Average Variance Extracted, CR - Composite Reliability

PEOU – Perceived Ease of Use, PU – Perceived Usefulness, UI – Usage Intentions

Figure No. 2: Path Analysis (A Model of Determinants of Usage intentions towards Mobile Wallets)



**Table No. 5 – Regression Estimates** 

			Standardized Regression Estimate	T-value.	P
PEOU	$\rightarrow$	Attitude	0.165	2.416	0.02
PU	$\rightarrow$	Attitude	0.44	5.272	***
Trust	$\rightarrow$	Attitude	0.392	7.207	***
Attitude	$\rightarrow$	UI	0.807	12.367	***

Table No. 6 - Goodness of Fit Indices

	Chi- square (p-value)	CMIN/DF	RMR	GFI	AGFI	CFI	RMSEA
Obtained	0	2.888	0.044	0.907	0.866	0.956	0.079
Cut-offs		≤5	≤0.08	≥0.9	≥0.8	≥0.95	≤0.08

Note: CMIN/DF = Chi-square/degree of freedom; RMR =Root mean square residual; GFI = Goodness of fit index; AGFI – Adjusted goodness of fit index; CFI = Comparative fit index; RMSEA = Root mean square error of approximation

# **CONCLUSION & IMPLICATIONS**

Penetration of 4G network on smartphones have made huge change in payment methods in India. Mobile wallets are revolutionising various existing businesses and their modes of transaction. The usage intentions are dependent on how and whether users feel the mobile wallets in terms of ease of use and usefulness. Another important concern of privacy and security which is reflected through Trust has a significant influence on usage intentions via developing an attitude towards the mobile wallets. The findings of the study are in line with existing literature.

The prime objective of this paper was to explore various determinants influencing usage intentions of the mobile wallets and build an empirical model in this context. The Structural Equation Modelling has validated the construed model with three determinants viz. Perceived Ease of Use, Perceived Usefulness, Trust influencing attitude which mediates the effect on usage intentions towards mobile wallets. The research provides insights to marketing practitioners and professionals to plan and implement their strategies.

# LIMITATIONS AND SCOPE FOR FURTHER RESEARCH

Each research provides many arenas of further research and so is true with the existing research. Likewise, the present study can be further researched in terms of differences across demographic variables like age, gender and income. Another study can also be conducted to assess the consumer perception across different players in the mobile wallets sector.

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# **Excerpts of Valedictory Address**

# Mr. Jayesh Bahadur

Mr. Jayesh Bahadur, Founder & CEO, Kachi Sozo Business Services, consented to deliver the Valedictory Address. He emphasized that business transformation is led by digitization. He explained several factors related to digital business transformation, like- technological innovation and disruption, customer expectation with respect to changed business model and external influences comprising of regulatory laws and market competition.

# **Best Paper Presentation Award**

On the basis of fair evaluation by a panel of session chairs and blind reviewers, six of the eighteen presenters had been chosen as the Best Paper Awardees. Amongst six best papers, three of those were jointly authored by DSIMS Faculties and students. According to the policy of Remsons Research Centre of DSIMS and as a goodwill gesture also, the faculties of DSIMS keep themselves aside the prize winning competition of RIRC. Accordingly prize money of fifteen thousand, ten thousand and five thousand had been awarded to the following authors respectively for their research contribution in the field of Digital Transformation of Business.

- I. Dr. Dinesh D Harsolekar and Ms. Merlyn Michael D'Souza of IES, for their research paper titled as To Construct a Model to Mitigate Assumed Stress Levels Amongst Administrators of Private Hospitals in Greater Mumbai in the Digital Age
- II. Mr. Aditya Dhanuka and Ms. Abhilasha Bohra of DSIMS MMS Batch 2018, for their research on Binge Watching: Web Series Addiction Amongst Youth
- III. Dr. Deepa Rohit and Prof Gayatri Magi of Lala Lajpatrai Institute of Management for their research titled as Determinants of the Usage Intentions towards Mobile Wallets: An Empirical Study

# The three best internal papers by joint authorship of DSIMS faculties and students are as follows:

- I. Impact of Digitization on Efficiency of the Working Capital Finance Process & Financial Performance - A Study of Kotak Mahindra Bank Limited' by Ms. Sayali Shelar and Dr. Sharad Kumar
- II. 'An Empirical Study to Explore the Brand Positioning Strategies in Personal Care Products' by Ms. Prabhneet Saluja and Dr. Padma Singhal
- III. 'A Study on How Digital Payments Have Revolutionized the Customer Experience' by Dr. Dhanashree Potey and Mr. Jay Soni

The Jury members awarded the certificates to the awardees and all the presenters. The best six papers mentioned above will be published in two subsequent issues of volume two of **The Management Quest**, a Bi-Annual Research Journal of DSIMS, under the aegis of Remsons Centre for Management Research, with Online ISSN: 2581-6632.

In recognition of the significant research contribution made by DSIMS faculties in the last academic year by publishing their research papers in reputed national and international journals, Remsons Research Centre awarded cash prize to fourteen DSIMS faculty members.

# **Concluding Note**

A unique endeavor on the part of the Institute was to host a conference on *Digital Transformation* of *Business* as one of the most critical strategic pillar of Indian growth trajectories in times of uncertainty. The Conference was indeed a grand success.



# Institutions



Kudilal Govindram Seksaria

sarvodaya school

INSPIRE, INVENT, INITIATE



Durgadevi Saraf junior college
IN PURSUIT OF EXCELLENCE



Deviprasad Goenka
management college of media studies
INDIA'S PREMIER MEDIA SCHOOL



Draupadidevi Sanwarmal
women's hostel
HEAVENLY DOMICILE



Jankidevi Bilasrai Bubna
boys hostel
A WISE HIVE



Kudilal Govindram Seksaria english school Inspire, Invent, Initiate



Ghanshyamdas Saraf college of arts & commerce EDUCATION EMPOWERS



Ladhidevi Ramdhar Maheshwari <u>night college of commerce</u> <u>ENLIGHTENING FUTURE</u>



Pravinchandra D. Shah

sports academy

ETTNESS REGIME



Nalini Shah music academy MUSICAL HARMONY



Ramniwas Bajaj english high school unleash your potential



Kirandevi Saraf institute of complete learning widening horizons



Ramdhar Maheshwari career counseling centre steering to success



RS CA study centre



Rajasthani Sammelan skill development centre



Mainadevi Bajaj international school GIVING WINGS TO YOUR DREAMS



Durgadevi Saraf institute of management studies we create leaders



Kunjbihari S. Goyal online academy

LEARNING BEYOND BOUNDARIES



Mainadevi Bajaj international playschool



Rajasthani Sammelan teachers' training institute BUILDING FOUNDATIONS

# **Endowment Funds & Research Chair**



Remsons Group

management research centre

management research



IRB
scholarship endowment fund
HONOURING EXCELLENCE



BKT
endowment freeship fund
FOSTERING KNOWLEDGE



Jankidevi Bilasrai Bubna endowment freeship fund EMBOLDENING STRENGTHS

# **Facilities**















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