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Journal of Management

Editorial

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Narasimham Mulakaluri

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The Gavesana Journal of Management is a bi-annual refereed journal of the Vignana Jyothi Institute of Management. Its objective is to disseminate knowledge of contemporary issues related to management and development. The journal seeks to serve as a platform for intellectuals to share the rapid strides made in contemporary research. The Research Journal has been registered with the Registrar of Newspapers for India (RNI) vide No. 108534/2010 dated 1/3/2011.

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EDITORIAL

Human Resource function (HR), in any organization, has to be that of a strategic or business partner, by developing the talent in the entity through job rotation, job enrichment etc., involving expert teams, business leaders and line management. Such a partnership is a long-term relationship to achieve objectives common to the partners, as also the organization's financial success. In the process, the HR employees, as partners, should perform their assigned roles, and also support the activities of those in other functional areas. This needs a strategic plan which dovetails the HR Vision and Mission into that of the organization.

HR, as a Strategic Partner - increases employee productivity and thus the organization's profitability; enhances competency and talent management; uses the technology and knowledge to formulate, implement and review strategies; copes with the changes in the business environment arising from unforeseen business situations, and globalization; and serves the internal and external customers well. This is done through efficient and effective delivery of human resource services. For this, the HR needs to spend more time in the organization's planning, design and development. It must become part of the business team, involved in planning at the highest level. HR Managers and HR professionals are strategically suited to provide the necessary leadership in change management, which is a challenging task.

The Human Resource Information System (HRIS) has to be effectively used to handle daily administrative HR tasks. Employees can make use of the self-service facility online, to support business strategy development and implementation, which saves time and costs. There should be an HR Head who understands well the strategic partnership/relationship between organizational strategy and human resources. He should be an expert in all HR functions. Someone from within the organization can be groomed for this role.

Research has shown that the HR function will be effective in achieving the business objectives when it assumes the role of a strategic business partner. The top management should ensure this. The administrative reactive approach in people management can no longer support the organization in a competitive business environment. If the HR function is decentralized fully, the line managers and supervisors will eventually put the blame on HR when problems arise. If this happens, it interferes with the effective use of line managers' and supervisors' time in the operations of the organization on daily basis. The line managers and supervisors need to be supported to make them more proficient in managing their subordinates in the performance of daily tasks. Complete participation of HR people in strategy development and implementation promotes HR as a strategic partner. The HR Manager and HR professionals should contribute to business decisions; develop business acumen to understand how a profitable business is run; be customer-centric; and learn how to link HR practices to the organizational business strategy.

The expectations from HR as Strategic Partner include: recruiting the right employees; align corporate values to the recruitment strategy; well-developed competencies of the workforce, and their relevance to organizational core business; participative culture where HR initiatives fully support the overall strategic plan; discard ineffective HR practices that do not contribute to the success of your organization. HR management requires continuous improvement i.e., Kaizen to ensure and retain its relevance as strategic partner. For this, capable and committed people are needed at every level, supported by senior management. Change has to be managed well to avoid or minimize disruption in the organization's activities, and for its success.

The effectiveness of the HR people as a strategic partner is also dependent upon the corporate policies and practices, structure, types of activities carried out, location, effective communication, leadership and motivating employees to keep moving in the right direction as per plan. Every aspect of HR has to be reviewed in the process of implementing the necessary changes and reorganization. Having the right is crucial to help them succeed and engage their full attention with the view to ensure HR truly becomes strategic partner. The HR Scorecard shows whether the organization is making good progress on making HR as strategic partner. The competitive advantage of the organization can be enhanced by aligning the HR strategies to the overall business plan. To ensure that HR truly becomes a strategic business partner, adequate financial backing is necessary. One needs to take measures to eliminate or minimize risks to HR, and it should be ensured that HR plays a meaningful role and not necessarily a major role, particularly during financial crises. It cannot also be a trial and error approach.

In fact, in a business landscape that is changing fast, there is an imminent need for HR to be an active strategic partner. By aligning itself with strategic plans of the business, it needs to foster a stronger relation between the executive team and the workforce. Externally, it can make valuable contribution to branding and the tone of communication. By leveraging customised, more personalised metrics and deep analytics, it can vastly improve organizational learning, training and improve decision-making. Consequently, the human capital program will lend more impact, thereby encouraging and enhancing collaboration between various functions across the organization. HR can no longer be just a functional arm, a distant participant, but will have to assume the role of strategic partner, integral to organizational well-being and growth.

Dr. Ch. S. Durga Prasad

Leveraging Chatbots for ‘the Edge’ in Business

Alok Ranjan* and Narasimham Mulakaluri**

Abstract

Organizations are looking forward to exploit Machine Learning/Deep Learning (ML/DL) capabilities for various aspects ranging from cost efficiency, automation to real time decision making. Identification of the problem area and appropriate choice of the ML/DL algorithm are essential for a successful endeavor. In this paper we will focus on the impact generated by the text and voice based analytics in service based industries and their future. “Chatbot” is a promising tool which uses advanced text analytic algorithms (like Natural Language Processing). These are increasingly being deployed by insurance, banking, retail/e-commerce portals to engage with customers. Large volume of routine customer service requests can be handled by a chatbot thereby decreasing average handling time and costs. A customized “chatbot” which fulfills certain design criteria will be rewarding for organizations. Importance of the design lies in the fact that it gives an immediate alternative to a distracted customer. Additionally, inclusion of Artificial Intelligence with Chatbot can help organizations not only in retaining customers but also in acquiring potential customers. We will dwell on these design principles in the article. Chatbots do have technical limitations where human intervention is one way to mitigate that. In future, voice based chatbots allowing two-way conversation will hold the key for greater customer engagement.

Keywords: Machine learning, Artificial Intelligence, Chatbot, Business impact

Introduction

Digitization of customer interaction has created a unique space for data driven technologies to prosper and fuel business growth. Businesses are bullish in harnessing this space to augment capabilities ranging from real time decision making, cost efficiency to automation. Furthermore, rising demand for a flawless engaging digital experience by B2B and B2C consumers make it even more important for businesses to stay connected with the potential opportunity.

With the evolution of Artificial Intelligence (AI) Technologies such as Natural Language Processing (NLP), Machine Learning/Deep Learning (ML/DL) along with instant messaging, a new phase of automated user interaction has started. This intersection of AI and messaging is shaping the future of digital experience and thereby the overall business performance. Chatbots are perfectly positioned to assist organizations in this digital space.

Chatbot is a text or voice-based analytics program which mimics human interaction. Bot like interface was first developed by Alan Turing’s in 1950’s. Even though, advances in the technology continued through 70’s and 80’s, Chatbots were still in their nascent stage. With the arrival of AI and NLP based technologies, the capability of Chatbots were upgraded to the next level. At present chatbots can be broadly categorized into three distinct groups. First being the “Basic chatbot” which is a scripted response to a set of pre-defined questions, second being the “Intelligent chatbot” which is ML enabled and can interpret a request. Third is the “Interactive chatbot” which uses higher level of AI algorithms and can hold an end-to-end conversation with humans.

In the “age of customer”, Chatbots are transforming the way of interaction with businesses and brands. Moreover, they are also influencing the pathway in which products and services are designed, delivered and consumed. For example, Amtrak.com [1] has deployed a telephone-based virtual assistant “Julie” to guide customers through the website. This resulted in 25% more bookings and 30% more revenue. Chatbots are increasingly being deployed to handle large volume of routine service requests, thereby reducing average handling time and cost. Thus, bringing operational efficiency by augmenting human capabilities.

Growing Acceptability of Chatbots

The potential for a chatbot/virtual assistant-user interaction can be gauged from the Forrester report on customer service trends 2018 [2]. According to the report, 69% of the respondents have used chatbots/virtual assistants in the past 12 months, indicating wider acceptance among the consumers.

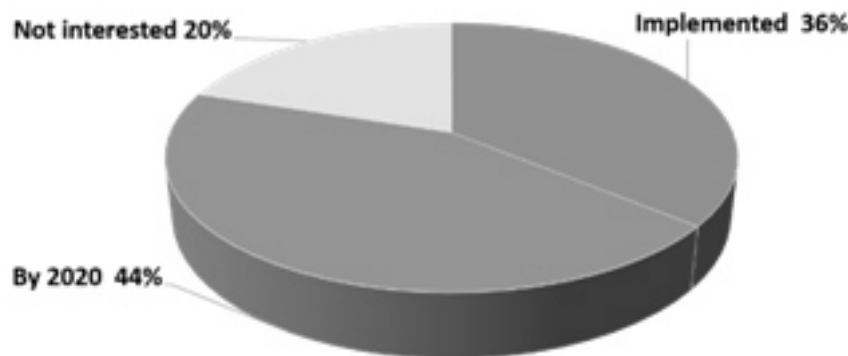


Figure I (3): Extract of the survey wherein chatbot is chosen as a suitable technology for improving consumer experience (CX). Sample size is 800, across manufacturing, online retail and telecommunications industries

Chatbots as an emerging technology is widely accepted among businesses. A survey of senior business leaders to determine the impact of emerging technologies on improving customer experience was done by Oracle [3]. According to the survey, 80% of the brands understand the potential of chatbot in business and will implement it by 2020, as shown in Figure-I. Major technology giants like Microsoft, Facebook, Google, Amazon, IBM etc. have created their own chatbots and are leading by offering customized enterprise solutions. Incidentally, a recent report by Grand View Research, Inc. [4] states that the global Chatbot market is expected to reach USD 1.25 billion by 2025, growing at a CAGR of 24.3%. It is now clear that businesses are exploring means to utilize AI technologies for their advantage.

Chatbots and its Impact on Business

Until now, we have explored the acceptability of chatbots in businesses. In this section we

Why Businesses should adopt Chatbot



Figure-II: Major Impact of Adopting chatbots will focus on the Business Impact.

Chatbots are gradually being deployed across several industries especially in Banking, Online retail, Entertainment, Airlines and Insurance sectors. Businesses are using chatbots not only to serve regular service requests but also engage new customers and generate potential leads. In fact, there is a cyclic pattern between growth of chatbots and volume of support requests an organization can handle. Chatbot can handle large volume of general queries, reducing average handling time, e.g. chatbot from Swedbank "Nina" [5] handles around 40,000 conversations a month and resolves 81% of the issues. In terms of operational cost and efficiency for businesses,

listed in Figure - II, chatbot can engage and guide new users on the platform, create bandwidth for regular employees for more important work, fast track resolutions and reduce head count for executives in a call center. Apart from these tangible benefits, chatbots also help in the creation of data that can be used for its training and for gaining new business insights. At present, it is difficult to quantify the venue generated or saved by a chatbot but one can measure its impact in terms of acceptance by the industry, usage and successful cases. According to some estimates [6], by 2022, chatbots are expected to cut business costs by \$8 bn. Intelligent chatbots may soon be part of every business.

Interesting Applications of Chatbots

Chatbots have not only reshaped customer interactions for business but they have also proved as a boon in diverse areas. A case in point is Endurance, a companion chatbot designed for Dementia patients. Many people with Alzheimer's disease struggle with short-term memory loss. Endurance aims to identify deviations in conversational branches that may indicate a problem with immediate recollection. In addition, since the chatbot is a cloud-based solution, physicians and family members can review communication logs taken from the bot to identify potential degradation of memory function and communicative obstacles that could signify deterioration of the patient's condition [7]. Another interesting chatbot is Casper's amazingly named Insomnobot 3000, a conversational agent that aims to give insomniacs someone to talk to while the rest of the world rests easy [7].

To help reduce its staff's workload, Australia's Department of Human Services (DHS) has deployed an internal virtual assistant called Roxy to answer queries from case processing officers. Roxy uses machine learning and natural language processing to understand human language and respond to questions about the rules and regulations of the department's programs.[8] The virtual assistant currently responds to more than 78 percent of the questions put to her.[9] Prior to Roxy, DHS staff would call human experts for assistance. Now, those experts only get involved in complex queries.[10] According to DHS's Chief Technology Officer Charles McHardie, "It's been quite successful at reducing their workload." [11]

Proposed Chatbot Implementation Framework

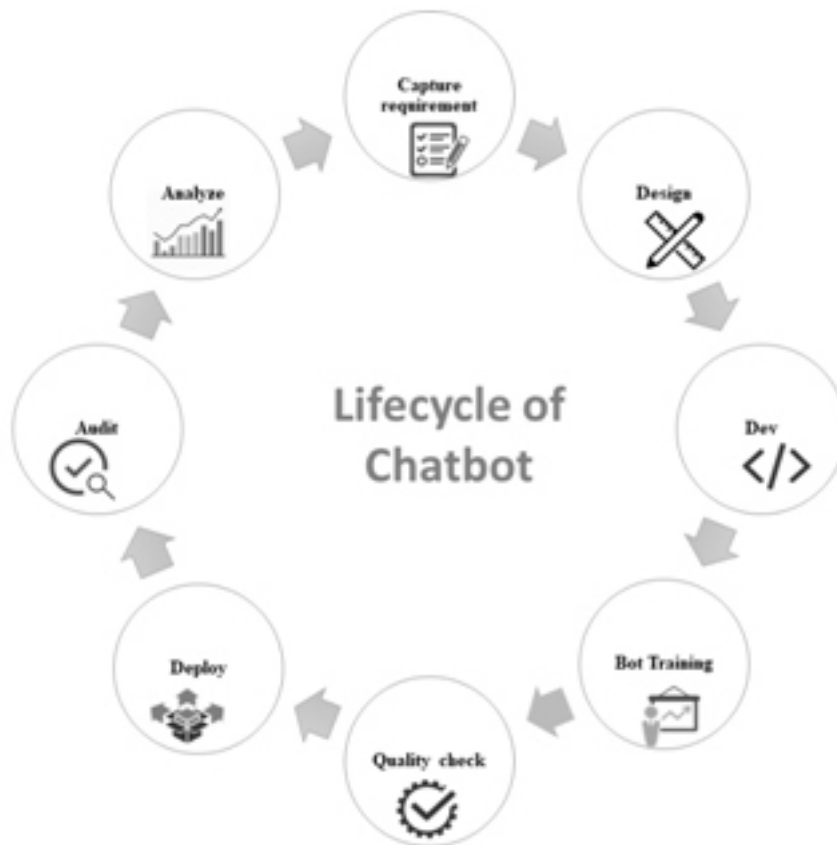


Figure-III: Shows Various Steps Involved in the Life Cycle of a Chatbot

Based on our industry and research experience in the area of artificial intelligence, we propose a simple yet effective framework for successful implementation of chatbots for a business (shown in Figure - III). It starts with identifying the correct business/operational area/process that needs to be handled by the chatbot. This is supremely important as the correct identification can enhance the productivity, free up resources for value added work and help extend a competitive edge. In the design phase, specifications along with the choice of programming language and ML algorithms is to be decided. Our suggestion is that along term view and a futuristic approach should be adopted where in scope for upgradation and adoption of new technology is amply take care of. Subsequently, development of chatbot should be taken leveraging the tools decided in design phase. Post that chatbot is to be trained to impart it the domain and contextual awareness. Afterwards, it should be deployed in the intended media for the business process identified. Finally, chatbot activity should be continuously audited to analyze its productivity.

Apart from these, for a seamless integration of chatbot in business environment softer cultural aspects should be amply taken care of. Especially encouraging and building human trust on chatbots, availability of right kind of talent to handle the project and readiness of the leadership to accept the changes and necessary alignments are vital for the success of chatbot integration and reaping its benefits.

Conclusion

Chatbot is a promising technology which is being increasing used across industries to enhance customer experience. Some of the chatbots are able to interact with humans and have an end to end conversation. It can bring cost effectiveness and operational efficiency in businesses by reducing average handling time, customer retention and increased productivity. Research indicates that 70% to 80% of service requests can be handled by a chatbot successfully. Beyond cost reduction, business benefits can include round the clock assistance, competitive edge and increased first time resolution apart from customer retention. However, it is important to note here that chatbots do have limitations in terms of algorithmic constraints and physiological factors. Hence, there should be a robust mechanism to immediately redirect unsatisfied customers to human agents. An effective chatbot integration with a business process can only take place if talent and leadership is on boarded truly embedding the spirit of augmenting humans with technology instead of trying to replace humans with technology. Therefore, establishing human trust on chatbots and artificial intelligence tools is essential for leveraging these advanced technologies for gaining the competitive edge in business.

References

- [1] <https://emerj.com/ai-sector-overviews/7-chatbot-use-cases-that-actually-work/>
- [2] Kate Leggett, 2018 Customer service trends, Forrester. (weblink: <https://lmistatic.blob.core.windows.net/document-library/boldchat/pdf/en/forrester-2018-customer-service-trends.pdf>)
- [3] Can virtual experience replace reality?, Oracle. (weblink: https://www.oracle.com/webfolder/s/delivery_production/docs/FY16h1/doc35/CXResearchVirtualExperiences.pdf)
- [4] <https://www.grandviewresearch.com/press-release/global-chatbot-market>
- [5] <https://www.linkedin.com/pulse/5-ways-chatbots-can-improve-customer-experience-banking-blake-morgan/>
- [6] <https://www.juniperresearch.com/researchstore/innovation-disruption/chatbots/subscription/banking-e-commerce-retail-healthcare>
- [7] <https://www.wordstream.com/blog/ws/2017/10/04/chatbots>
- [8] Microsoft News Center, "Australia embraces cloud and AI to deliver a new class of intelligent solutions says Microsoft CEO—Satya Nadella," November 16, 2016.

[9] Australian Government Digital Transformation Agency, "Address to the AIIA: Navigating Digital Government Summit 2017," April 6, 2017

[10] Allie Coyne, "DHS' new front-line will be virtual assistants," IT News, December 19, 2016.

[11] *Ibid.*

Impact of HR Analytics in Improving Company's Bottom-line

Anand Hangal* and Dr. Sarit Kumar**

Abstract

It is the evidence that makes us to take right decision. HR Analytics is used across most of the IT Companies across the world. HR Analytics starts with collecting, managing and analyzing big data which is stored in various forms within the organization. Organization can really make a difference if they use this data for analysis, identify right candidates for a job, identify who are the top performers in the organization at the risk of leaving the job, identify what gaps can be predicted ahead and evaluate HR initiatives like training and performance management which can really improve business bottom line.

The bottom line of any organization cannot be successful until the workforce related decisions are backed up by data analysis. HR Analytics brings in clarity in employee trends in various areas either in recruitment, retention management, training and development, compensation management, performance appraisal or productivity.

HR analytics helps management in providing data driven insight which helps management proactively address those issues directly helps in improving bottom line.

By going through series of benefits that we derive from HR Analytics it is clear that HRA plays vital role in improving company's bottom line by driving value to through the people. Hence employees and managers needs to be more proactive and work efficiently the only the organization will become more competitive and profitable.

Keywords: HRA, HR Analytics, analysis, Data analysis

Introduction

Organization today is becoming highly competitive in terms or processes, policies and decision making capabilities. Right from finding talent, training them, retaining the best talent and giving them career opportunity, HR function is striving hard to accomplish this goal. With the help of innovative tools and latest technology, decisions are taken based on relevant and historic data.

With the introduction of HR analytics, which believes decisions can be taken based on available relevant data, HR processes are aligned to business goals. This study examines how HR analytics facilitates and fine tune improvement in all the process resulting in to increase in revenue generation. Through data analytics, the goal is to transform large complex masses of data into knowledge and, in this way, help the decision-making process of HRM by helping to make more accurate and data-driven decisions and also to make a forecast about the future, not just describe the past.



HR analytics can be used to address HR key drivers in the business such as performance management, 360° appraisals, T & D, Career planning, recruitments, retention strategies, Human resources is always considered as an asset to every organization, to have a competitive advantage employees must be treated as an optimum resources. Human resources plays a pivotal role in any organization and capitalize on employee's performance to achieve business goals.

There's no doubt that any business which can attract the right talent and manage talent effectively, utilize capacity effectively,

engage their employees and retain employees is setting itself up for long-term success. Organization has begun to realize that with sophisticated technology available they can use the available big data to arrive at concrete decisions.

Use of extensive data, analysis and predictive models and fact based data will drive management to take correct decisions. This data is related to employee benefits, compensation management, PMS, career path planning, recruitment and training. considering the extent of data available with HR, proper utilization of the same is not more active.

HR interventions like training and development can lead to outcome such as an increased employee satisfaction and commitment that subsequently influence the organizational performance in a longer run. Even in the increasingly competitive environment today, HR practices that build employee commitment can help expand organizations responsiveness. The success of the organization depends on people. Human resources help to cope and survive in the midst of fast growing and fast changing socio-economic environment by exploiting business opportunity with the minimum risk and challenges.

Earlier data collected by the HR Department was mere used to display facts and figures organization has achieved but was not proactive enough to produce meaningful information to the organization about people related issues. The data so collected was was focused more on the department rather than for the organization to take any strategic decision.

HR Analytics has been rising trend for the past few years and many believe that it may be the answer to challenges HR is facing. Big data is transforming large complex data into knowledge and which will help organization in taking strategic decision making related to people. HR analytics data will not only predict the behavior of people but also showcase their trends and patterns in which they may behave.

Organization is moving from data management to Evidence Based Decision. Data is collected related to people, productivity, age, experience, performance, gender, absenteeism, sales, revenue, knowledge, people effectiveness, recruitment, training, etc. Evidence based data is pulled out and analysis is done based on true facts and figures. HR analytics is still struggling at their initial stage in gathering, collecting relevant data to be predicted for the future and management rightly use this data for business decision making.

Understanding HR Analytics Model

The HR data and information is stored in every organization and was used for day to day administrative function. Whether it is recruitment, identifying training and development needs within the organization, measuring the performance of every employee, understanding why an employee leaves the organization, HR was providing all data stored since a longer time and was managing complete gamut of HR function.

Organization was also limiting to their basic requirement of analyzing this data. Department like sales, marketing, finance which is to be the major revenue generator department continue to get an upper hand as compared to HR which was considered as a cost center for any company.

Although without hiring of talent people and training of employees the company won't see progress, the fact remained that the company has always see HR Dept as a support and administrative function.

The big question was how to change this mindset and be a part of company's main revenue stream. With the advancement of technology and Big data coming through various sources, HR was able to showcase how it can add value to the overall revenue stream and improves company bottom line. Since HR was managing the complete people management process for the organization, it was indeed very critical to be a part of revenue stream to prove its existence and effect on business to be strategic partner.

HR was forced to validate their role in the strategic role. Lot of research was done on how HR can contribute to strategic goal of the organization. HR data driven and Predictive model came into picture and with advancement in technology in analytics, HR analytics was developed and data was shared with management which acted as a tool

to access performance of employees, critical hiring decisions, retention management and so on.

But it was all not so easy to implement. Analyzing HR data required software which will analyze

- a. Behavior
- b. Pattern
- c. Trend

of employees from historic data. Available data was no longer used to just describe the situation or why it was happened but also data would predict the future of the above challenges.

Primary research was conducted on a sample of 30 small scale business in Bangalore to understand how HR analytics can add value to the business in strategic decisions and improving their bottom line. Following inputs from the primary research is adopted in these business.

1. **HRA in Talent Management:** Hiring is always been a core HR function in every organization and is not limited to just interview and selection. HR was hiring candidates on various parameters and using newer benchmark to assess capability and compensation. Right from performing background verification of previous companies to capability hiring and comparing the best fitment into the organization ,

Post HRA Intervention

HR analytics has gone one step ahead and got involved in the business operation by analyzing why is this position important and how will it create value to the organization. Capability hiring was at the core. HR analytics has given all meaningful data to HR department to analyze and understand the position much better and how the position was successful in future. Predictions was made based on historic data on how existing employees have performance or under-performed and their capability matrix and educational qualification. By throwing this result to the HR , hiring of candidates was much more easier. HR analytics is more proactive rather than reactive.

2. **HRA in Measuring the Performance:** Performance of employees was at the core to the success of the organization. HR department has started reviews taken from various reporting structure of an employee and shared the data with the management. Appraisal was purely based on the review which the supervisor has given to his subordinate.

Post HRA Implementation

HR Analytics has changed the concept and started capturing data from day one the employee has reported the organization. Monthly performance, trends and employee behavior was captured and the data was put up in the software which would then analyze performance, success factors and behavior and skill areas which helped organization in forming a right opinion about the employee .

3. **HRA in L&D:** Training was done assumption and based on the need identification. TNI used to be circulated to all the employees and their reporting managers to understand what and how much training is required by every employees. There was never used to be any concrete measurement of Training requirement.

Post HRA Implementation

With HR analytics the process of L&B has become much more easier. Skill data was available with HR and which was used to highlight necessary training requirement. Organization need not go on intuition and gut feeling to select necessary training needs.

HRA in Attrition Management: Data thrown by the HRM was only limited to people left the organization and why they left. It was a post-mortem job by HR which helped the organization to ensure that those issues are taken care properly,

Post HRA Implementation

HR analytics predictive modeling has cut down the post-mortem work and helped org with data which says who are the most likely talented people who might leave. This data/prediction has helped management in a bigger way by counselling such top talent and understanding their current issues. This will curtail down attrition in a larger way.

Data to Big Data

Data driven HRM is based on facts and data. Earlier HR used to collect and store employee data but was never clear why the data is saved and what will result into and when will be utilized. The focus was more on the organizing and storing of data rather than how it can be turned into meaningful information which will help management in taking right decision.

Big data as the name suggest is the vast quantity of data and information, which is collected through various sources, which can be processed and analyzed instantly to draw conclusions for taking decisions.

With the evolution of new technology Big data is used in every stage of employee life cycle as well as business life cycle. Big data has and will “Continue to evolve at a very fast pace, drive by innovation in the underlying technologies, platforms and analytic capabilities for handling data, as well as evolution of behavior among its users as more and more individual live digital lives” (Manyika *et al.* 2011, p.4)

This means large sets of structured, unstructured data which increases continuously and can be found from internal and external sources.

Internal Data Source: Source of data can be from HRIS, Payroll, Financial statements, sales data, etc.

External Data Source: Source of external data can be from market, external research survey, social media, blogs and social media platforms such as twitter and linkedin.

Big data is used by different organizations in different sectors. It can be used by:

- A. **Retailers:** Retailers used big data to predict customer behavior, pattern and shopping habits. Employers can attempt to increase the productivity of their employees. Big data allows companies to gain a better understanding of customer buying behaviors and shopping pattern.
- B. **HR Department:** What does big data means for an HR? Software companies such as ADP, Taleo Corp, IBM, SAP Labs are few to name are working with the tools required to analyze big data to help organization with predictive modeling, evidence based data to support their decision making across levels and verticals. HR has basically two sources of data-one which is collected by employee's record or operations and secondly collected from external systems. Findings indicate that HR most likely spends most of the time in administrative functioning and transactional job. Big data has enabled management in changing its thinking perspective and focusing more on historic data, predictive analytics and statistics to take decision.

Google became the #3 Most valuable firm by using people analytics to reinvent HR, “Sullivan (2013) writes, “Google has the only HR function on the planet that is managed based on people analytics”.

Challenges in Using HR Analytics

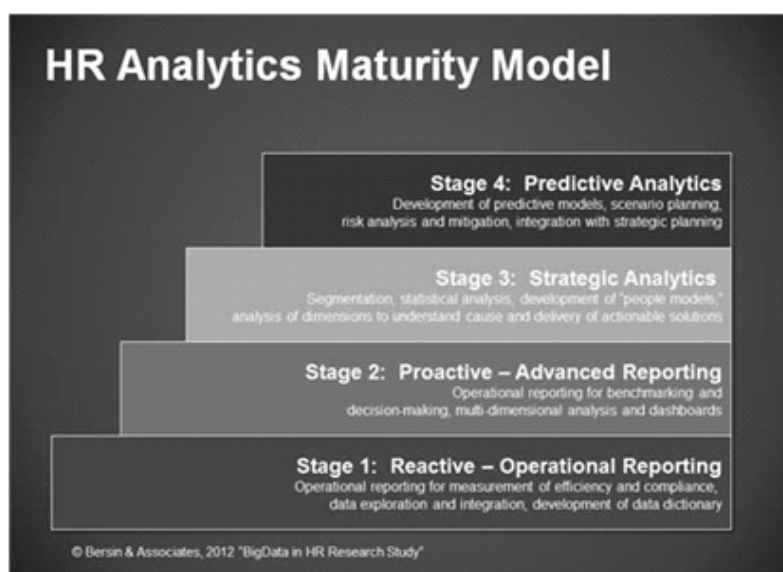
When it is understood by the HR professionals and Business that HRA will increase productivity, why HR professionals are not involved in analytics is a question mark. There could be many reason as came out during the research:

- **Lacks of knowledge:** Most of the HR professionals are involved in the administrative function of HR and they are not aware of the technology know-how and reluctant to learn the analytics.
- **Discomfort level Using Analytics:** Not every HR professional is comfortable using big datas and analyzing through it and report to management
- **Lack of Organization Support:** It is something new which is seen after previous research done, organization sometimes do not want to invest their time in existing data and analyzing it for decision making purpose. Rather such organization still wants to continue using older method for measuring employees. (Giuffrida, 2013, and Rafter, 2013a)

HR Analytics – Model

Level I: Reporting

The mantra “start small” applies here: don't try to address the entire organization, or even the most



Important metrics. Focus on one business unit and determine a few reports and parameters its leaders want, even if those metrics are basic and not entirely helpful. Once you have manually developed a reporting structure, you can look at systematizing similar reports for other units.

Level II: Analytics

Analyzing workforce data is only the second phase. Once you have the reporting foundation in place, drill deeper by segmenting information (i.e., examining turnover rates by critical job function, by department, etc.), determining probabilities of certain scenarios (attrition probability) and identifying the reasons that causes attrition.

Level III: Workforce Modeling

Workforce analytics will only get you so far. Workforce modeling is where real business value starts to come into play. With a streamlined workforce analytics engine humming, you can focus on broader workforce scenarios. For example, a company could have a policy of buying a certain job skill from the external market versus building that position from within. Is the company spending more but making more as a result, or is money and internal potential being wasted?

Level IV: Strategic Workforce Planning

We strongly encourage an emphasis on strategic workforce planning, which is why in addition to our Evidence-Based HR we also host a Strategic Workforce Planning Exchange, which focuses on building a robust platform that enables the business strategy to meet growth targets.

Conclusion

Impact of HR analytics will help organization achieve the desired goal by improving business performance through People performance and aligning individual goal to business goals. By using historic data and behavior pattern HR analytics gives management a tool in hand for taking strategic people and business decision

The problem of Recruitment, Retention, Engagement, Attrition and Performance can be solved with the help of HR analytics. HR analytics indeed has facilitated the improvement of workforce performance by increasing individual productivity and hence has generated bigger revenues.

Future predictions from HR analytics can come handy to many organizations in understanding their employees' longevity in the organization and basis which organization can prevent people leaving organization which will lead to higher productivity and bigger revenues.

Preparing Talent for Change-A Case Study of South Central Railways

C. Asha* and Dr. G. Manchala**

Abstract

The aim of this paper is to explore the Effective Talent Management Strategies and analyze the relationship between talent management strategies and employee engagement. This paper is based on the academic literature review of the popular research studies. So, it is a conceptual paper. Success stories of various flourishing businesses have been credited to the talented employees of those organizations. Organizations design different strategies to build a healthy relationship with talented employees such that they are ready to face any competition. This leads to getting an engaged and satisfied workforce. Therefore the key to the success of any facing organization change is satisfaction of its talented employees. Among the various strategies the best one would be Employee Engagement. Engaged employees care about the future of the company and are willing to invest their full effort to see the organization success. Therefore effective strategies help in retaining, engaging and utilizing the most precious asset of the organization, i.e., “Its Talented Employees” and this is possible by engaging them.

Keywords: Talent management, Employee engagement, Effective strategies, Talented employees, Organization change

Introduction

The key to success in today’s world is its talented employees. Any organization that aims to survive in the global market needs to successfully undergo organizational change sooner or later. As it is said “Change is the only thing constant”. The sooner a company adapts organization changes, the quicker it moves towards success. In order to achieve this target, one has to have engaged or talented employees. Hence various talent management strategies are adapted in each organization to accomplish their desired objectives. The managers have to implement retention plans so that they could keep their top talented employees. It is an accepted fact that engaged employees are those who are emotionally connected to the organization and are cognitively vigilant. They develop a sense of belongingness for their organization. Managers therefore need to identify the various strategies to.

retain talented employees in an organization. Of all the various strategies, the best one is to find the reasons for employee engagement and facilitate them. Good HR managers need to make employee engagement one of their priorities and take all possible steps to ensure talented employees are fully engaged in the organization. This in turn would lead to ensuring that change management initiatives are successfully implemented.

Established in 1853, Indian Railways is the second largest rail network in the world and caters to the transportation needs to millions of individuals within India annually. Among the sixteen Railway zones, the South Central Railways (SCR) is one of the biggest railway Zone in Indian Railways covering southern peninsula covering the massive transportation of customer and goods. Headquartered in Secunderabad, the South Central Railways serves the economically vibrant states of Telangana, Andhra Pradesh, parts of Maharashtra, Madhya Pradesh and Tamil Nadu.

Although several case studies have looked into the functional aspects of Indian Railways as a whole, there are no published reports specifically on organization changes leading to talent management which is the need of current hour in Indian Railways. Similar to other zones, the South Central Railway is bureaucratic and follows a hierarchical model thereby making organizational changes for retention of talent all the more important for efficient functioning. The objective of this research therefore is to provide an insight and critically evaluate the degree of satisfaction among talented individuals with respect to organizational changes within South Central Railways with emphasis on the following aspects:

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1. Understanding whether the current organizational changes pattern within South Central Railways was acceptable and helpful for engagement of talented employees.
2. Effect of gender on employee satisfaction with respect to the existing organizational changes pattern and impact on future globalization.

Brief Overview of Literature

Dan Crim and Gerard Seijts have mentioned the ten C's of Employee Engagement in the *Ivy Business journal* published in April 2006. They are Connect, Career, Clarity, Convey, Congratulate, Contribute, Control, Collaborate, Credibility and Confidence. According to Stockley's paper published in 2007, Talent Management is recruitment, selection, identification, retention and development of employees who have the potential for high performance. As per Lockwood 2006, effective talent management needs strong participatory management, employee motivation and co-ordination between employer and employee to work towards a common goal of achieving organization's objectives. It is also given that employee engagement and talent management together can make or break the bottom line in an organization. The best talent management plan should be closely aligned with the company's strategy and overall business prospects. Goals therefore need to be aligned such that the job roles of every individual in the organization is made clear as it also reflects the value of employees to the organization. Upon engaging employees in their work through goal alignment, a sense of ownership is created thereby increasing the commitment level leading to higher levels in job performance.

Effective Strategies for Talent Management

Talent management when handled systematically and strategically flows from an organization's mission, vision, values and goals. This enables every employee to see where he or she would fit within the organization. Below are the various talent management strategies:

1. **Relationship Management:** The relationship between the organization and the talented employees should be more than mere formal official relationship. They have to be trusted and a friendly bond should be developed.
2. **Designation:** The talented employees should be given the designation as per their choice and whatever makes them worth their efficiency like Partner or Director.
3. **Compensation and Fringe Benefits:** The organization should pay special allowances, pay packages and in addition pay options like stock, profit sharing so that they take responsibility of success as well as failure.
4. **Recognition:** Credit should be given for work done by talented employees. Their efforts should be recognised in the organization.
- 5) **Freedom:** Talented employees should be given flexibility of working hours, rules, regulations, creative freedom, working methods and styles freedom to enhance organizational efficiency.
- 6) **Healthy, Challenging and Creative Work Environment:** Talented employees should be given creative and challenging atmosphere so that their creative skills and potentialities is tapped. At the same time talented employees should be provided with such atmosphere where their work is appreciated.
- 7) **Company Representation:** Organization should send them for various committees, negotiations, conferences where the talented employees are representing the company.
- 8) **Decision Making Authority and Participation:** Talented employees should be given an opportunity to take decisions, make strategies and should be given access to critical and secrets of the organization.

9. **Continuous Learning and Development:** Learning is a continuous process. The talented employees should be given adequate training in skill, knowledge so that they are up to date with the changing technologies. Therefore organizations should continuously aim to develop learning and development programs for talented employees.
10. **Career and Succession Planning:** Despite providing all the facilities sometimes talented employees may leave the company. In such cases succession planning should be made so that work is not disrupted. To avoid such situations organizations plan with the talented employees their long term careers. The career path should be challenging and competitive so that talented employee's interest is intact in the work.

Employee Engagement

David Maclead outlines employee engagement as the prevailing conditions wherein employees offer more of their capability and potential. It is an organization's approach to ensure that employees are committed towards their organization and are motivated to contribute to its success and also able to enhance their sense of well-being. Employee engagement also refers to the emotional commitment of an employee towards his organization and its values. Such employees do not work for salary or bonus but work for company's goals on behalf of the company.

Relation Between Talent Management and Employee Engagement

Talented employees in a company continuously try hard to outperform themselves and set their own standard of excellence. Talented employees are “high flyers” with potential to develop. They possess innovative skills, creative thinking and positive approach of work behavior. Talent management strategies directly affect the employee engagement and overall business performance. Employee engagement in fact is the best talent management strategy. An engaged employee will always bring more value to the organization. If an organization hires a wrong employee then in spite of giving all facilities to that employee he will never be engaged and as a result will never bring value to the organization. Engaged employee gives higher service, quality and productivity. This leads to higher sales and customer satisfaction and finally higher levels of company's profits. Engaged employees not only bring value to the organization but also creates value for the customer. Employees participate in overall direction of the company. From a strategic perspective, an effective talent management system helps employees to stay connected and engaged with the organization. It helps these crucial employees to feel as if they are part of something bigger than their current job. Employee engagement is definitely the best strategy for effective talent management. Effective talent management strategies and policies in an organization results in more engaged employees. Also employee engagement is the best strategy of talent management. Both are above statements may sound confusing as both are interlinked.

Methods

A questionnaire was prepared and handed out to 20% of employees in each department (accounts, personnel, commercial, language, and medical) so that uniformity is maintained. Approx. 310 employees filled the questionnaire. The questionnaire comprised of five questions with respondents requested to circle the option they deem most appropriate. Options comprised of A- Strongly Disagree, B-Disagree, C-Neither Agree nor Disagree, D-Agree, and E-Strongly Agree. Questions posed in the questionnaire were as follows:

1. I am encouraged to come up with new ways of doing things in my role.
2. My manager regularly gives me input about any organizational changes that are implemented by management well ahead of time.
3. I feel I have an opportunity to show my leadership skills in the organization.
4. I am given the opportunity to be involved in decisions that affect my work.
5. I feel motivated to go beyond my formal job responsibilities to do my job.

For data analysis, alphabets were converted into numbers (A = 1, B = 2, C = 3, D = 4, E = 5) to arrive at the scoring pattern depicted in the graphs.

Hypothesis was tested using applicable statistical procedures to determine the correlation between the variables outlined in the questionnaire. Testing includes working out a statistical model based on the data generated on a randomly selected sample assuming that the null hypothesis is true, when the study is on a randomly selected representative sample. Column statistics were employed to analyze the difference between male and female respondents questionnaire for each individual section. Following column statistics, the test was employed for arriving at a conclusion on the significance of the data and validity of the null hypothesis. Because the number of male respondents were higher than females, an unpaired test was used. A one-way Analysis of Variance (ANOVA) followed by post-hoc Tukey's multiple comparison test was employed to determine differences in scores for questions. A two-way analysis of variance (ANOVA) was employed to estimate the interaction and impact of gender on the response. All statistical analysis was conducted using Graphpad Prism (Version 5.02) and differences were seemed significant at $P < 0.05$.

Results and Discussion

The research questionnaire provided to randomly selected employees of South Central Railways was an attempt to understand the extent of satisfaction provided by the practices currently employed by the human resource department with respect to organization communication. Besides, the impact of gender on the overall response was determined by enrolling both males and females for the survey. A total of 312 employees (268 male and 44 female) were surveyed across designations with varying years of service. Employees were handed over the questionnaire and the duly filled responses were entered into an excel database for analysis.

Scores were not different ($P = 0.35$) between male and female respondents (Figure 1) for questions on organizational communication (difference between means = 0.06). However, average scores were different ($P < 0.0001$) within males and females indicating a variability in their responses. Mean values for scores across all the questions posed among males and females were 3.156 ± 0.395 (Range = 1.8-4.2; Median = 3.2) and 3.218 ± 0.538 (Range = 1.8-4.6; Median = 3.2). Overall, data indicate an absence of gender effect with both sets of responders scoring above average on the questionnaire.

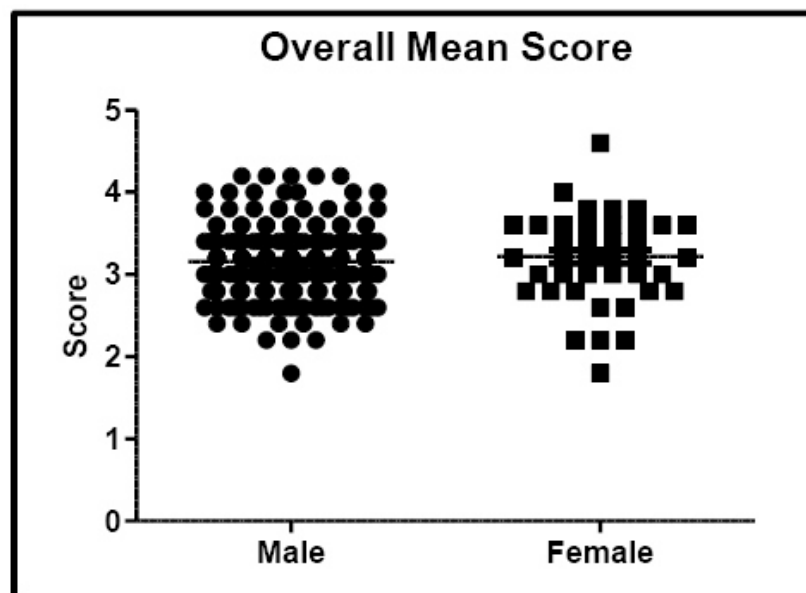


Figure 1. Overall mean score across gender

A Tukey multiple comparisons test was employed to determine the differences in average score between each question across all responders (Figure 2). Differences in scores were significant ($P < 0.05$), between most questions asked except for 1 (there is a healthy balance of work and personal life that does not leave me fatigued) vs. 5 (I feel secure about by future growth and success in the organization), 2 (my manager regularly gives me feedback about the area that I need to develop/improve and helps me work on them) vs. 3 (I feel I have the opportunity to show my leadership skills in the organization), and 2 ((my manager regularly gives me feedback about the area that I need to develop/improve and helps me work on them) vs. 4 (the organization follows two-way communication and not just flowing from top to bottom). Rank order of scores for question within this section was $1 > 5 > 3 > 2 > 4$ indicating that employees were satisfied with the work-life balance and were secure about their future and growth prospects at South Central Railways. Employees however, appear to be less than satisfied with the frequency of feedback given to them by their managers and desire more avenues to display their leadership skills. Because communication forms a backbone to success for most hierarchical organizations, it is imperative that communication mechanisms are streamlined to achieve maximal efficiency and avoid inter-personal conflicts.

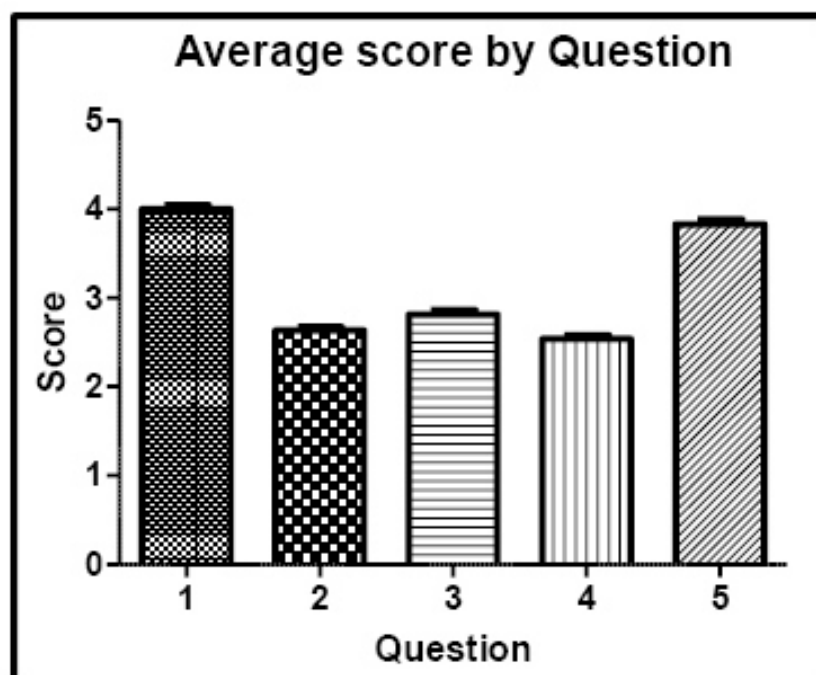


Figure 2: Average Score by Question Across all Respondents

Figure 3 depicts the effect of gender on the responses to the questions posed to the employees at South Central Railways on organizational communication. While differences between scores for individual questions ($P < 0.0001$) were obvious for both males and females, a trend towards significance ($P = 0.051$) was observed for the question by gender interaction indicating that gender did have a role to play in deciding outcomes to the questionnaire. Females tended to score higher on questions 2, 3, and 4, but lower on question 5 when compared to males indicating that they were happy with the quality of feedback and communication followed at South Central Railways. Males on the other hand tended to be more assured about their success and future in their organization. As elucidated by Karima Merchant, psychological differences in communication styles between men and women create gender stereotypes. Leadership skills and abilities of females are often portrayed negatively thus making it hard for women to achieve success and thereby creating a blanket of job insecurity. To eliminate gender stereotyping and bias, organizations must proactively plan initiatives that nurture growth and advancement of female leaders.

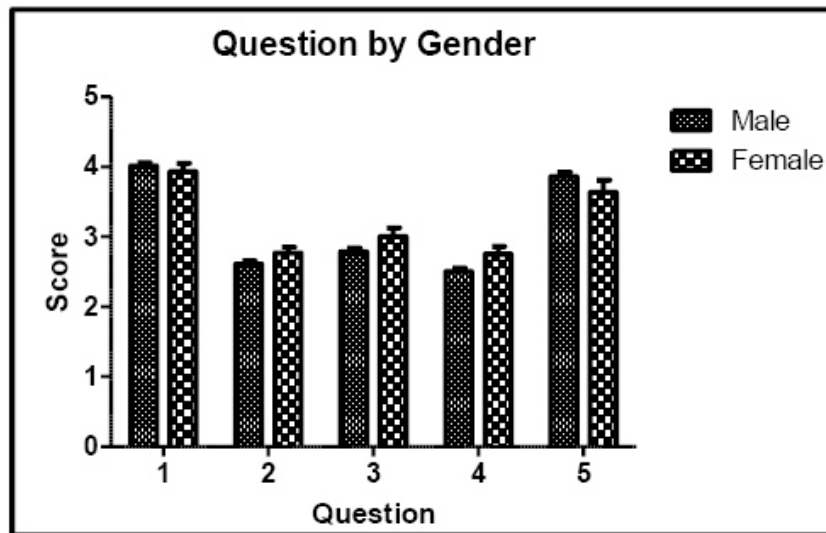


Figure 3: Average Score by Question Between Males and Females

Summary and Conclusion

Being the largest employer in the world, organization change at Indian Railways is undoubtedly a complex and mammoth task. However, based on a representative sample of respondents comprising of both males and females within the South Central Railway zone, it can be concluded that the level of changes done is able to retain talent in the organization and is at par or exceeds employee expectations overall. Improvements are however required with respect to the frequency of feedback given by managers as well as the avenues provided for future growth.

The practices of Talent Management and Employee Engagement are interlinked with each other. Talent Management is integral to engaging employees in the organization. Proactive measures should be taken and talent management strategies should be adapted in an organization. Of all the strategies the most impactful one is employee engagement. Hence in order to maximise the benefits of both the employee engagement and talent management the organization should create an engagement culture which develops leaders who can enhance the performance of both talent and engagement and overall organization's goals are accomplished.

The current study indicates that employees irrespective of gender are aligned with the organization's growth and goals. Business leaders who have the best talent management processes in place are better prepared than their competitors to compete in the global economy and capitalize quickly on new opportunities. True success is only available when organizations do more than adapt to long-term trends; they must be able to anticipate and jump on new opportunities before the rest of the market.

The challenge today is not just retaining talented employees but also fully engaging them especially in government bodies. Similarly employees can be engaged only through focused talent management measures so that it is mutually beneficial. The level of preparedness in government organizations such as the Railways with respect to talent scouting, preparation, retention, and change is therefore encouraging and is bound to have a broader impact on the industry's growth in general.

References

- 1) Aon Hewitt (2013), Trends in Global Employee Engagement ([www.aon.com/2013/Trendsin Global Employee Engagment](http://www.aon.com/2013/TrendsinGlobalEmployeeEngagment)).
- 2) Essentials of Human Resource Management and Industrial Relations by P. Subba Rao (5th Revised Edition 2012) by Himalaya Publishing House.
- 3) <http://iveybusinessjournal.com/topics/the-workplace/what-engages-employees-the-most-or-the-ten-cs-of-employee-engagement#.VEXd3yKUdZ8>.
- 4) <http://humanresources.about.com/od/Strategic-HR-Management/qt/best-talent-management-practices.htm>

- 5) http://www.zanett.com/assets/pdf/wp_datasheets/Economist-White-Paper-building-an-integrated-talent-management-strategy.pdf
- 6) <http://www.engageforsuccess.org/about/what-is-employee-engagement/>
- 7) <http://www.leadershipacademy.nhs.uk/wp-content/uploads/2014/07/Insight-2-Talent-Management-and-Employee-Engagment.pdf>
- 8) Gerard H. Seijts and Dan Crim Special to the globe and mail published April 28, 2006. The ten C's of Employee Engagement
- 9) Stockley D (2007). Talent management concept - definition and explanation (online) available from <http://derekstockley.com.au/newsletters-05/020-talentmanagment.html>
- 10) Lockwood, N. (2006) Talent Management: Driver for Organizational Success. SHRM Research Report Quarterly. [https://www.shrm.org/ Research/Articles/ Articles/ Documents/ 0606RQuartpdf.pdf](https://www.shrm.org/Research/Articles/Articles/Documents/0606RQuartpdf.pdf)
- 11) In 2009 BIS published Engaging for Success (more commonly known as the MacLeod Report), a study by David MacLeod and Nita Clarke of over organisations across the UK.

An Application of the “Recursive Flexible Window” Methodology to Test for Financial Bubbles in the Indian Stock Market

Swarna D. Dutt* and Dipak Ghosh**

Abstract

Identifying and dating financial bubbles in real time is in the forefront of current empirical research. Their accuracy provides very useful “warning alerts” to central bankers and fiscal regulators with real time data. But the complexity of their nonlinear structure and the inherent sudden break mechanisms makes the econometric testing challenging.

The new recursive flexible window methodology provided by Phillips, Shi and Yu (2015) gives consistent results and delivers significant power gains when multiple bubbles occur. It successfully identifies the well-known historical episodes of exuberance and collapse.

Here we look at the Indian stock market index, the SENSEX and the NIFTY 50, to see if there is any evidence of a bubble there. We use monthly data for each series, with the Sensex data spanning April 1979 to October 2018 and NIFTY 50 data spanning July 1990 to October 2018. The existence of (more) bubbles in this index will give us some indication of where, in an economy, bubbles are more likely to occur, and therefore provide evidence of potential economic (financial) crises. We believe that this information will be of interest to researchers in this field.

Introduction

History is replete with incidents of financial crisis, which ex-post become a wake up call for policy makers and the people. Again and again it was stated by experts that the present crisis was preceded by “asset market bubbles” and / or “excessive credit expansion.” But the fact of the matter remains that we do not have good quantitative markers which can ex-ante indicate the genesis of a momentum being built in the asset / credit markets which may lead to a catastrophe down the line. If we had quantitative observable “warning signs” many an economic debacle can be avoided. Thus after the most recent global financial crisis of 2007-2009, the main thrust in the Basel III accord was to emphasize on more close and determinate market surveillance, so that bankers and policy makers could be forewarned of a possible impending implosion.

But as Cooper (2008) said “Economists have taught us that it is unwise and unnecessary to combat asset price bubbles and excessive credit creation. Even if we were unwise enough to prick an asset price bubble, we are told it is impossible to see the bubble, while it is in its inflationary phase.” Thus we have to accept that there is no practical way to identify the genesis of a crisis. Thus the task at hand is to try to identify possible quantitative markers from the data, that something is “awry” and that a speculative bubble is probably taking shape. It will worsen if measures to “quell” it is not taken, now. That is where the Phillips, Shi and Yu (PSY henceforth, 2014) research comes into effect. This paper offers the first powerful and credible “quantitative metric” to detect exuberance in financial data, right where it is originating. This procedure helps us pinpoint the start of the problem, and can thus help us monitor the markets. Once detected, the counteractive policies can be promulgated and implemented.

Since we know that history has proven that it has a bad habit of repeating itself, this early warning diagnostic tool will come in handy, in helping make / alter policies to avert the impending crisis. The best part of this test is that it can be implemented on current data in real time and try to detect the “fault lines.”

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In the economics literature we have multiple tests to detect ex-post the crisis, and then explain it. Gurkaynak (2008) is a good review of this documentation. But there was no test to ex-ante identify the origination of a bubble which is in the making. Phillips, Wu and Yu (PWY henceforth, 2011) presented a recursive method to detect exuberance in asset prices during an inflationary phase. The advantage here being that the early detection (ex-ante acknowledgment) can help banks / regulators / policy makers to address the problem in its nascent state. PWY was very effective in the early detection of bubble markers, provided there was a single bubble / turbulence in the data sample. They proved the effectiveness of the test using NASDAQ (PWY, 2011) and the US housing bubble, Phillip and Yu (2011).

But then came the question of “economic reality” which showed that there usually were multiple recurring financial crises, over long periods. Ahmed (2009) gave us evidence of 60 different financial crises, in the 17th century alone. Thus the next step in the evolution of these detection tests was to create the one that could identify multiple bubbles in the same sample period. A test to clearly make periodic collapsing and recovering economic data was simply not there. This recursive identification is extremely complex compared to identifying a single bubble. The main problem is computationally handling the non-linear structure of multiple breaks / bubbles in the data. With the presence of multiple break points in the data, the discriminatory power of the detectors go down dramatically and hence the upswings and downswings are not decipherable in the same data stream. Thus the challenge is twofold:

1. Come up with a statistical metric which can detect multiple factual fractures in the non-linear data stream
2. Be powerful and effective enough so as not to have a low false negative detection tolerance (to avoid unnecessary policies) and also a high positive detection tolerance (so as to ensure good and early effective policy application).

The PSY (2014 and 2015) papers presents a recursive econometric technique to test financial bubbles in the same sample data, and separate them when multiple bubbles are present. Here the authors extend on their (PWY, 2011) methodology, which is based on a sequence of forward recursive right tailed ADF unit root tests, using the Sup ADF (designated SADF) measure. This process allows for a dating strategy to identify the origination and termination dates of a specific bubble. This is achieved by using “backward regression techniques.” The PSY (2014 and 2015) papers presents an extension of the SADF tests, in form of a generalized SADF called the GSADF method. It includes a recursive backward regression technique, to time identify the origin and collapse of bubbles. It is a right tailed ADF test, but has a flexible window width to separate one bubble from the next, to the next sequentially, since their lengths are bound to be different. In structure and logic, it is analogous to the left-sided recursive unit root test of Leybourne, Kim and Taylor (2007), this being a right-sided double recursive unit root test.

In this paper we implement this test to the monthly BSE Sensex (April 1979 to October 2018) and the Nifty50 (July 1990 to September 2018) indices. We find evidence of the existence of multiple bubble in this index, which correspond closely to reality. We believe that this information will be of interest to researchers in this field. Section 2 describes the reduced form model, the new rolling window recursive test and its limit theory. Section 3 elaborates the data stamping strategies, to separate single, double and multiple bubbles in the same sample period. Section 4 is simulation results of the size, power and performance of the dating strategy tests. In section 5, they apply the PWY test, the sequential PWY test and the CUSUM test to the same index data. Section 6 concludes.

Rolling Window Test for Bubbles

PSY (2015) develops the limit theories and consistency properties in case of single and multiple bubbles. PSY (2015 b) is a supplement describing the robustness checks of this testing procedure.

It originates with the standard asset pricing model:

$$P_t = \sum_{i=0}^{\infty} \left(\frac{1}{1+r_f} \right)^i E_t(D_{t+i} + U_{t+i}) + B_t \quad (1)$$

where

P_t = after dividend price of an asset

D_t = payoff (dividend) from the asset

r_f = risk free interest rate

U_t = unobservable fundamentals

B_t = bubble component

Here $P_t^f = P_t - B_t$ (market fundamentals) and B_t satisfies the sub martingale property

$$E_t(B_{t+1}) = (1 + r_f)B_t \quad (2)$$

This equation sets up the alternative scenarios for the presence / absence of bubbles in the data. For example: If there are no bubbles, the $B_t = 0$, then the degree of non-stationarity [I(0) or I(1)] of asset prices is controlled by asset payoffs or dividends (D_t) and the unobservable economic / market fundamentals. The advantage of the reduced form model is that it pretty much encompasses all standard formulations as intrinsic bubbles (Froot and Obstfeld, 1991), herd behavior (Abreu and Brunnermeier, 2003), time varying discounting (Phillips and Yu, 2011)1.

A possible outcome would be like this: If D_t is an I(1) process, the U_t has to be either I(0) or I(1) and asset prices can at the most be a I(1) process. But based on Equation. (2), if there are bubbles, then asset prices will be explosive. Thus when the fundamentals are I(1) and D_t is first difference stationary, we can infer bubbles if asset prices show evidence of explosive behavior. Equation (1) is one way to include a bubble variable in the standard asset pricing model, but the jury is still out on this.

According to Phillips and Magdalinos (2007), explosive behavior in asset prices is a primary indicator of market exuberance, which can be identified in empirical tests using the “recursive testing procedure” like the right side unit root test of PWY. This recursive procedure starts with a martingale null (with drift to capture long historical trends in asset data.) The model specification is:

$$y_t = dT^{-n} + \theta_{yt-1} + \epsilon_t \quad (3)$$

where ϵ_t is iid $(0, \sigma^2)$, $\sigma = 1$, and d is a constant, T is the sample size, and the parameter n controls the magnitude of the intercept and the drift, as $T \rightarrow \infty$. Solving eq. 3, gives us the deterministic trend, dt/T^n . Here there are three possibilities:

1. If $n > 0$, the drift will be small compared to the linear trend.
2. If $n > 1/2$, the drift is small relative to the martingale.
3. If $n = 1/2$, the output behaves like a Brownian motion, which is evident in many financial time series data.

The researcher needs to be careful and exercise caution because the emphasis here is on the alternative hypothesis, because departures from market fundamentals are the markers of interest. But as with all types of model specifications, we know that they are sensitive to intercepts, trends and trend breaks, etc., as described in PSY (2014). Eq. 3 is tested for exuberance using the rolling window ADF approach or the recursive approach of the authors. The basic logic is that if the rolling window regression starts from the r_1 th fraction and ends with the r_2 th fraction (from sample size T), then $r_2 = r_1 + r_w$, where r_w is the size of the window. This model is:

$$\Delta y_t = \alpha_{r_1, r_2} + \beta_{r_1, r_2} y_{t-1} + \sum_{i=1}^k \gamma_{r_1, r_2}^i \Delta y_{t-1} + \epsilon_t \quad (4)$$

where k is the lag length, and ϵ_t is iid, with $(0, \sigma_{\epsilon}^2)$. The basic form is reformulated to include the presence of “multiple bubbles” to separate the market switching time periods from explosion to contraction, and again explosion sequentially. They use the Sup ADF test called SADF. It is a recursive / repeated estimation procedure with window size r_w , where r_w goes from r_0 (smallest sample window fraction) to r_1 (largest sample window fraction), and sample end point $r_2 = r_w$, going from 0 to 1. The SADF statistic is:

$$SADF(r_0) = \sup_{r_2 \in [r_0, 1]} ADF_{r_0}^{r_2}$$

Rolling Window GSADF Test: The ADF regression is run on Equation (4), recursively, but continuously on sub-samples of the data based on window width chosen according to $r_0, r_1, r_2, \dots, r_w$. The sub-samples chosen here are more extensive than the SADF test. The difference here is that we allow the window width to change within the feasible range where $r_w = r_2 - r_1$. The GSADF statistic is:

$$GSADF(r_0) = \sup_{r_2 \in [r_0, 1]} \{ ADF_{r_1}^{r_2} \} \quad (5)$$

The GSADF statistic as given in Equation (5). Here we see that the limit distribution of the GSADF holds (is identical), but with the intercept and the assumption of a random walk structure, we have no drift or small drift. The GSADF's asymptotic distribution depends on the “smallest window width size r_0 .” Care needs to be exercised on choosing the width of r_0 . It depends on the number of observations in the sample.

Case (1): If T is small, r_0 has to be made large enough to ensure the inclusion of an adequate number of observations.

Case (2): If T is large, r_0 should be set small, so as to be able to include different “explosive” burst in the data. The authors run simulations and derive the Critical Values (CV's). The conclusions are:

1. As r_0 decreases, CV's of the test statistic increases.
2. For r_0 given, the CV's are constant in finite samples.
3. GSADF statistic CV's are larger than the SADF statistic, which is larger than the ADF statistic, and its concentration also increases, increasing confidence in the test outcomes. The backward SADF statistic is the sup value of the ADF sequence run over this interval.

$$BSADF_{r_2}(r_0) = \sup_{r_1 \in [0, r_2 - r_0]} \{ ADF_{r_1}^{r_2} \}$$

We see here that the ADF test is a special case of the backward sup ADF (BSADF) when $r_1 = 0$.

The empirical steps are:

1) Determine $ADFr_2$ and the sup ADF within the feasible range of r_2 (from r_0 to r_1 .) The origination of the bubble is dated. This procedure imposes the condition that the bubble marker is the existence of a critical value greater than $LT = \text{Log}(T)$. This separates the short and temporary market blips (which happen all the time in real life) from actual exuberance. Dating is done using the formula:

$$r_e^{\wedge} = \inf_{r_2 \in [r_0, 1]} \{r_2 : ADF_{r_2} > cv_{r_2}^{\beta_T}\} \quad (6)$$

and

$$r_f^{\wedge} = \inf_{r_2 \in [r_e^{\wedge} + \frac{\log(T)}{T,1}]} \{r_2 : ADF_{r_2} < cv_{r_2}^{\beta_T}\} \quad (7)$$

where $cv_{r_2}^{\beta_T}$ is the $100(1-\beta_T)$ % critical value of the ADF statistic based on $[T_{r_2}]$ observations.

Here $\beta_T \rightarrow 0$, as $T \rightarrow \infty$.

Data Stamping Strategies

The idea is to identify bubbles in real time data and then look for the “markers” identifying those bubbles / episodes of market exuberance. The problem is that the standard ADF test can identify extreme observations, as $r=[T_1]$, but cannot separate between a bubble phase observation from one which is part of a natural growth trajectory. Market growth is not an indication of bubbles. Thus ADF tests may result in finding “pseudo bubble detection.” Making this distinction is the major contribution of this test. The authors run backward sup ADF or backward SADF tests, to improve the chances of deciphering a bubble from a growth trajectory. The recursive test means running SADF backwards on the sample, increasing the sample sequence using a fixed sample r_2 , but varying the initial point from 0 to (r_2-r_0) . This gives the SADF statistic:

$$\{ADF_{r_2}^2\} \quad 0, r_2-0$$

Bubbles are inferred from the backward SADF statistic or the BSADF $r_2(r_0)$. The origin of the bubbles, the date and timing is the first observation whose BSADF statistic exceeds the critical value of the BSADF. The bubble ending date / time frame is the first observation whose BSADF is below the BSADF critical value. The intermediary time frame is the duration of the bubble. The origination / termination dates are calculated thus:

$$r_e^{\wedge} = \inf_{r_2 \in [r_0, 1]} \{r_2 : BSADF_{r_2}(r_0) > scv_{r_2}^{\beta_T}\} \quad (8)$$

$$r_f^{\wedge} = r_2 \in [\inf_{r_e^{\wedge} + \frac{\log(T)}{T,1}}] \{r_2 : BSADF_{r_2}(r_0) > scv_{r_2}^{\beta_T}\} \quad (9)$$

where $scv_{r_2}^{\beta_T}$ is the $100(1-\beta_T)$ % critical value of the sup ADF statistic, based on $[T_{r_2}]$ observations. β_T goes to zero, as the sample size approaches infinity. The distinction between the SADF and the GSADF (backward sup ADF) tests, both run over $r_2 \in [r_0, 1]$ is given by the statistic as:

$$SADF(r_0) = \sup_{r_2 \in [r_0, 1]} \{ADF_{r_2}\}$$

and

$$GSADF(r_0) = \sup_{r_2 \in [r_0, 1]} \{BSADF_{r_2}(r_0)\}$$

Simulations

Simulations were performed to examine the credibility of the PWY, sequential PWY, CUSUM and the GSADF test, in terms of size and power, but most importantly their capability to identify multiple bubble episodes. The basic data generating process is given by:

$$y_t = dT^{-n} + \theta_{yt-1} + \epsilon_t \quad (10)$$

with $\sigma = n = 1$. They examine two different models, namely Evans (1991) collapsing bubble and the PWY model. Simulations using the same data set, same number of observations / replications show that the size distortion of SADF > GSADF. The next question is the effect of the lag selection length. Both SADF and the GSADF have size distortion weakness. But its magnitude is small, when we use a fixed lag length in recursive tests. But GSADF has smaller distortion than SADF and thus has a leg up on the latter in lowering the probability of “false detection.” The authors recommend the fixed lag length use with the GSADF test for multiple bubbles. They find that the SADF test has an inherent weakness, evidenced again and again. It could not identify bubbles when the full sample was used, but was able to do so when the sample was truncated. But the recursive application of the GSADF test was able to identify multiple bubbles, without having to arbitrarily truncate / segment / re-select sample starting points. This is a major advantage of GSADF over the SADF procedure. Moreover, the results show that the bubble identification power of the GSADF test increases as the sample size increases.

Empirical Application

We use monthly data for the BSE Sensex for the period April 1979 to October 2018, for a total of 475 observations and for the Nifty 50 for the period July 1990 to September 2018 for a total of 339 observations. The BSE data set was obtained from the website of the BSE (https://www.bseindia.com/market_data.html). The Nifty50 data set was obtained from the website of NSE Indices limited (<http://www.niftyindices.com/reports/historical-data>), a subsidiary of National Stock Exchange of India Limited. The data used is the respective stock price index for the relevant month. We then conduct the SADF and the GSADF tests on the stock price index according to the basic model in Equation (1). The results are given in Tables 1 and 2. Also given in each table are the critical values of the two tests obtained from a simulation exercise using 2000 replications of the data in each case.

Both tests find evidence of bubbles or explosive sub-periods over the long-term data for both of the indices (test statistics in each case exceed the critical values for both test statistics considered). We then conduct a bubble monitoring exercise for each index using the backward ADF test and its critical value (using the PWY strategy), and the backward SADF statistic and its critical value (using the PSY strategy). This is done in graphs 1 – 4. In each graph the solid line represents the relevant test statistic, and the dark broken line represents the critical value, and the light broken line represents the BS Sensex index. Figures 1 and 3 present results from the use of the backward ADF test from the PWY paper, and Figures 2 and 4 present results from the use of the backward SADF statistics from the PSY paper. In Figure 1 we look at the BSE Sensex and the existence of a bubble (test statistic greater than the critical value) is evident in the mid 1980s, and again in the late 1980s to early 1990s. The period from mid 2004 to the end of our sample period in October 2018 is clearly very volatile, and some of this volatility is prior to the financial crisis. Figure 2 shows a bubble again for the mid 1980s and late 1980s to early 1990s (just like in Figure 1), and also a volatile period after mid 2004.. The ability of the BADF statistic to detect multiple bubbles is suspect, and therefore the results in Figure 2 (based on the PSY paper) are more reliable.

A similar bubble monitoring exercise is carried out for the Nifty 50 index in figures 3 and 4. Figure 3 indicates existence of multiple bubbles. These bubbles occur from 2004 till about 2008 and then a small one around 2010 and after 2014. Figure 4 indicates almost the same pattern

Results from the backward ADF and the backward SADF statistic are quite similar for the BSE Sensex and the Nifty 50. The backward SADF statistics (Figures 2 and 4) are considered more reliable for investigating multiple bubbles. Both indices have evidence for bubbles in the 2000s, upto about 2008 and again after 2014. We clearly do have evidence for a bubble in the 1990s and therefore we can conclude that there is evidence to support the widely referred to technology bubble in the late 1990s and early 2000s. There is limited evidence to indicate the existence of bubbles in 2007 -09 around the time of the financial crisis.

Conclusion

The new test, the GSADF procedure is a recursive test, able to detect multiple bubbles. It's a rolling window, right sided ADF unit root test, with a double sup-window selection criterion. The SADF test is good, but it cannot credibly detect multiple bubbles over the same sample data set. The GSADF test overcomes this weakness and has significant discriminatory power in detecting multiple bubbles. It makes it very relevant in studying the “time trajectory” of long historical data sets. We have evidence for the existence of bubbles in the 1980s for both indices, thus providing evidence of a volatile stock market in the 1980s. There is evidence in favor of bubbles in the early to mid 2000s, before the time of the financial crises of 2008. Bubbles again reappear from the about 2014 onwards. This is likely due to fall in the value of the rupee and other changes in the Indian economy and the economy of its neighbors and major trading partners.

Bubbles are an indication of market volatility in India, and the existence of bubbles in the 2000s is very likely an indication of the inter-relationship between Indian and foreign stock markets. While domestic economic policy is obviously a primary indicator of market volatility, the impact of foreign economic events cannot be ignored. The Federal Reserve's interest rate policies are not only important for the United States, but since the US is India's largest export market, these policies are also important for India. The volatility from 2014 onward is likely a reaction to the prolonged growth since the financial crisis and also the slowdown (or future slowdown) in many European and North American economies.

Table 1: BSE Sensex

	Test Statistic	Finite Sample Critical Values		
Number of observations = 474		90%	95%	99%
SADF	8.6552	1.2037	1.4447	2.0588
GSADF	8.6552	2.0352	2.2836	2.8509

Table 2 Nifty 50

	Test Statistic	Finite Sample Critical Values		
Number of observations = 339		90%	95%	99%
SADF	4.5858	1.1390	1.4196	2.0308
GSADF	4.9365	1.9611	2.1967	2.7155

Figure 1: BSE Sensex Backward ADF Statistic

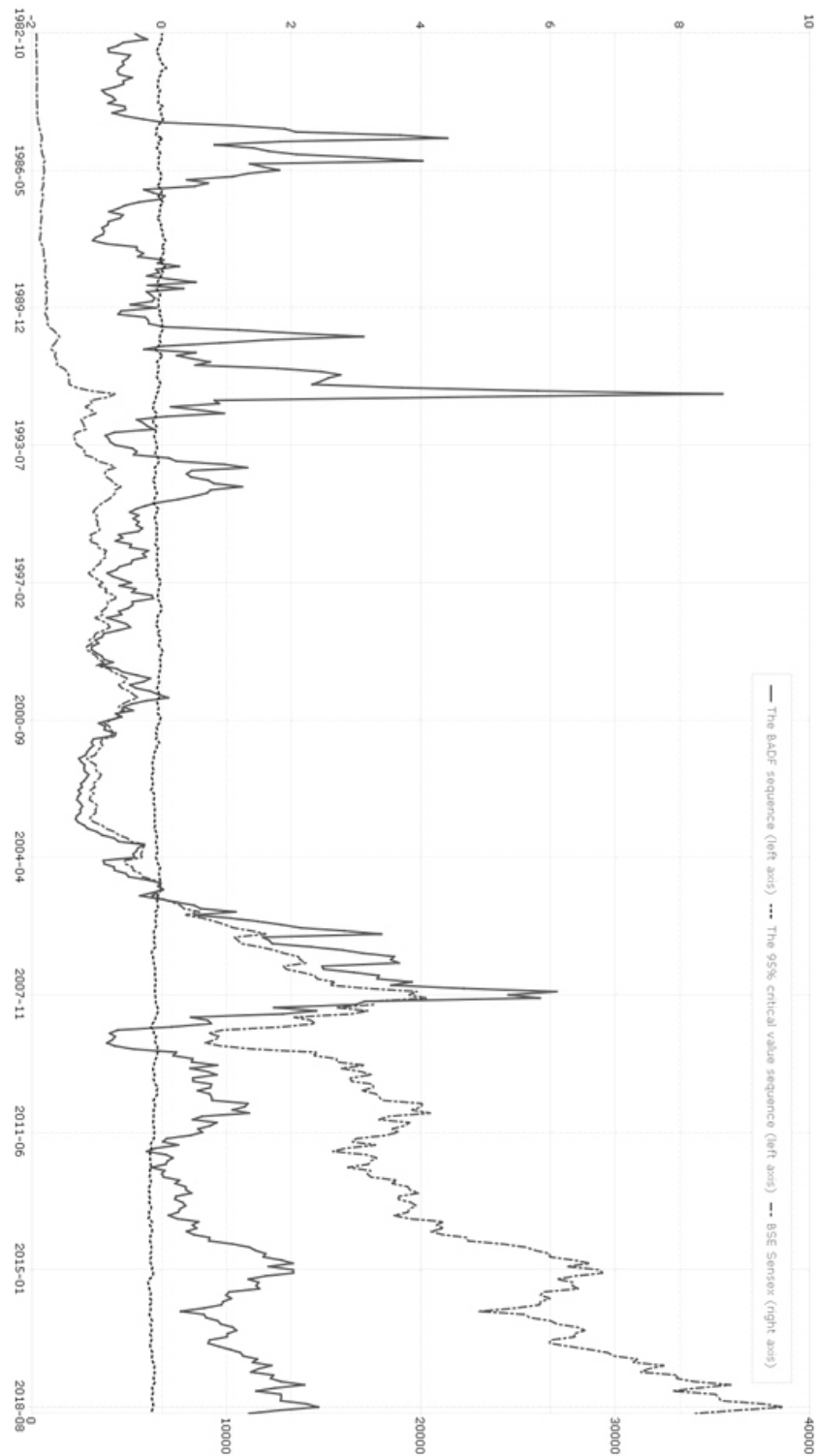


Figure 2: BSE Sensex Backward SADF Statistic

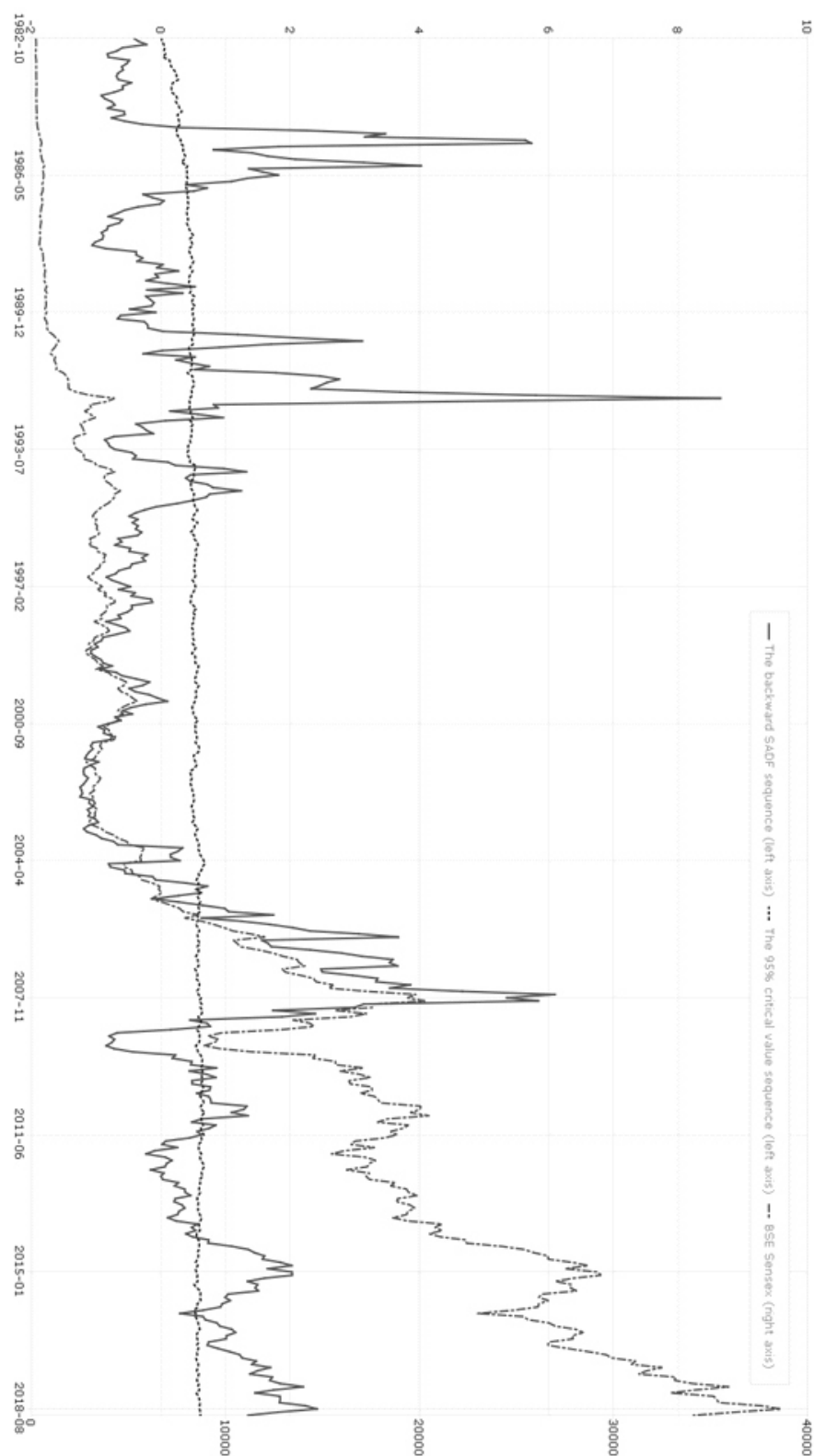


Figure 3: Nifty 50 Backward ADF Statistic

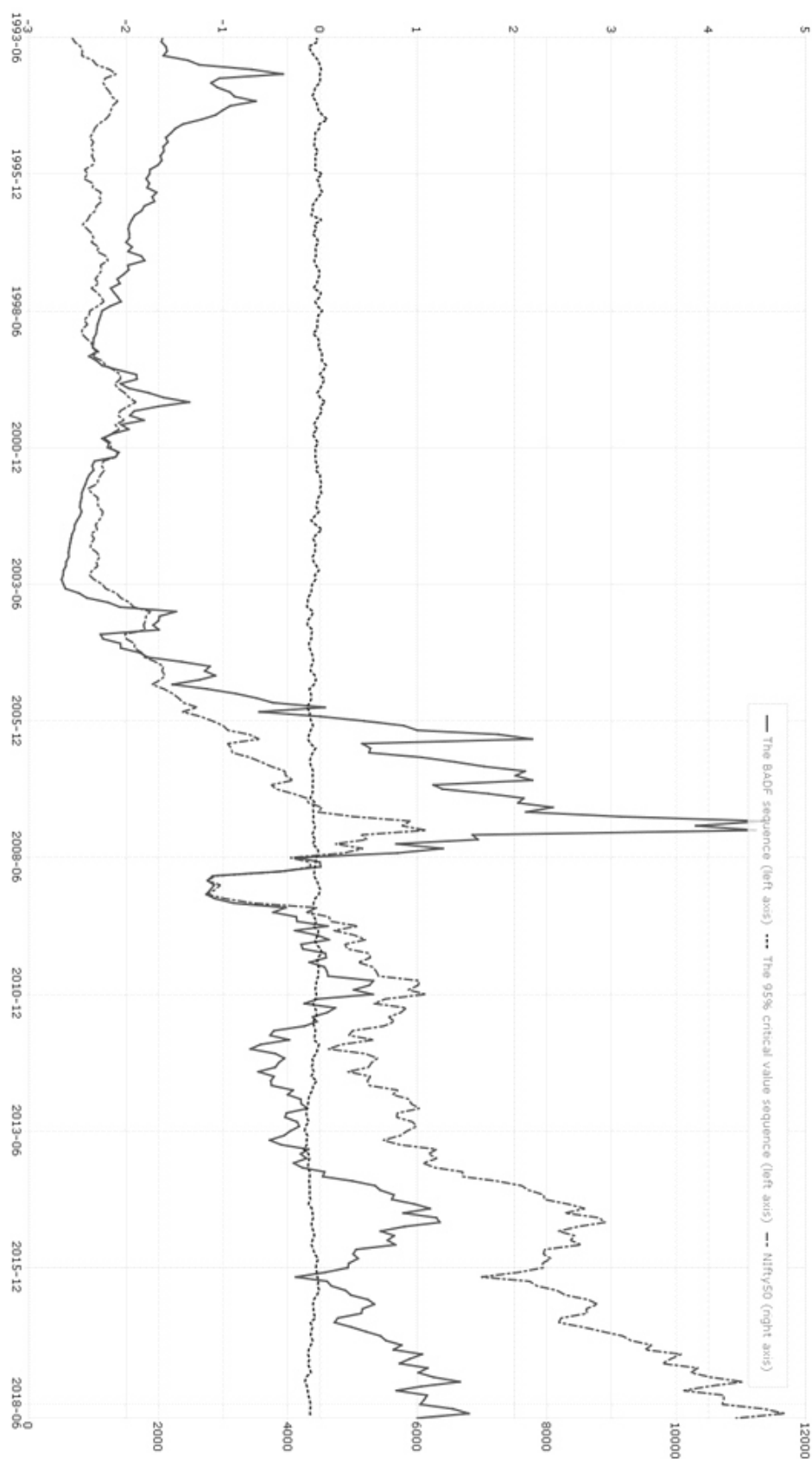
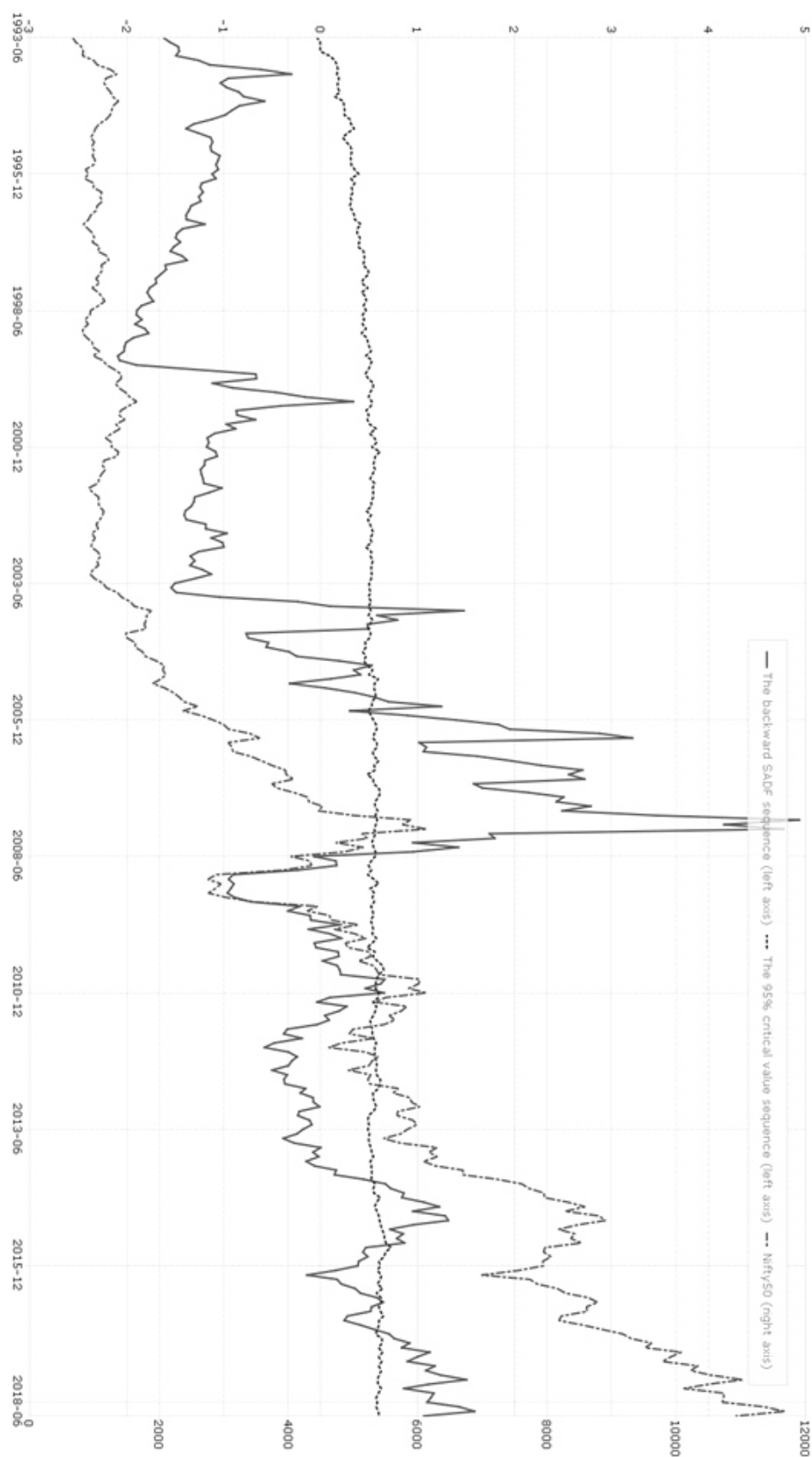


Figure 4: Nifty 50 Backward SADF Statistic



Notes

- 1) See Shi (2011) for an overview of this literature.
- 2) Cochrane (2005) debates the rationale of including “bubble components” in an asset pricing model, while Cooper (2008) expresses bewilderment at the literatures attempt to rationalize the well accepted NASDAQ bubble, as an accurate reflection of the changing market times and environment.
- 3) Interestingly, the experts agree more on the presence of market exuberance leading to panics, either rationally or irrationally. It's based on changing economic fundamentals, arising from behavior alterations of market players, or due to changing discount rates over time etc.
- 4) Then there is the Markov-switching test of Hall, et.al (1999), to detect explosive behavior in the data sample, but it is open to suspicion since Shi (2013) found it to be susceptible to “false detection of explosiveness.” Also, according to Funke *et.al.* (1994) and Van Norden and Vigfusson (1998), general filtering algorithms cannot differentiate between spurious explosiveness (the marker being high variance) as opposed to generic explosive behavior. The general approach of SADF is also used by Buseti and Taylor (2004) and Kim (2000) among others, to study “market bubbles” but the simulation study done by Hogg and Breitung (2012) finds the PWY (SADF) test to be the most powerful metric in detecting multiple bubbles.
- 5) Equation (5), Theorem 1, from PSY (2014).
- 6) The data process before the origination of the bubble is assumed to be a random walk for convenience, and it is the usual practice, but not necessary for the asymptotic properties to hold.
- 7) The authors have proven the consistency of (\hat{r}^e, \hat{r}^f) in PY (2009). Also see Phillips and Solo (1992) and Phillips and Shi (1994).
- 8) This sequential procedure (for proper and credible application) requires a long set of observations, the longer the better, in order to re-initialize the test process after a bubble.

References

- Abreu, D., and M. K. Brunnermeier, M. K. (2003). Bubbles and crashes. *Econometrica*, 71, 173-204.
- Ahmed, L. (2009). *Lords of Finance: The Bankers Who Broke the World*, (New York: Penguin Press).
- Buseti, F., and A. M. R. Taylor. (2004). Tests of stationarity against a change in persistence. *Journal of Econometrics*, 123, 33-66.
- Cochrane, J. H. (2005). *Asset Pricing*. Princeton: Princeton University Press.
- Cooper, G. (2008). *The Origin of Financial Crises: Central Banks, Credit Bubbles and the EfficientMarket Fallacy*. New York: Vintage Books.
- Evans, G.W. (1991). Pitfalls in testing for explosive bubbles in asset prices. *American Economic Review*, 81, 922-930.
- Froot, K. A., and M. Obstfeld. (1991). Intrinsic bubbles: The case of stock prices. *American Economic Review*, 81, 1189-1214.
- Funke, M., Hall, S., and M. Sola. (1994). Rational bubbles during Poland's hyperinflation: implications and empirical evidence. *European Economic Review*, 38, 1257-1276.
- Gurkaynak, R. S. (2008). Econometric tests of asset price bubbles: taking stock. *Journal of Economic Surveys*, 22, 166-186.

- Hall, S.G., Z. Psaradakis, and M. Sola. (1999). Detecting periodically collapsing bubbles: A Markov switching unit root test. *Journal of Applied Econometrics*, 14, 143-154.
- Homm, U., and J. Breitung. (2012). Testing for speculative bubbles in stock markets: a comparison of alternative methods. *Journal of Financial Econometrics*, 10, 198-231.
- Kim, J. Y. (2000). Detection of change in persistence of a linear time series. *Journal of Econometrics*, 95, 97-116.
- Leybourne, S., Kim T-H., and A. M. R. Taylor. (2007). Detecting multiple changes in persistence. *Studies in Nonlinear Dynamics and Econometrics*, 11, 1-32.
- Phillips, P.C.B., and T. Magdalinos. (2007). Limit theory for moderate deviations from a unit root. *Journal of Econometrics*, 136, 115-130.
- Phillips, P.C.B. and V. Solo. (1992). Asymptotics for Linear Processes. *Annals of Statistics* 20, 971-1001.
- Phillips, P.C.B. and S. Shi. (2014). Financial bubble implosion. Working Paper, Presented at NZESG Conference.
- Phillips, P.C.B., Shi, S., and J. Yu. (2014). Specification sensitivity in right-tailed unit root testing for explosive behavior. *Oxford Bulletin of Economics and Statistics*, 76, 315-333.
- Phillips, P.C.B., Shi, S., and J. Yu. (2015). Testing for Multiple Bubbles: Limit Theory of Dating Algorithms. *International Economic Review*, 56, 1079-1134
- Phillips, P.C.B., Shi, S., and J. Yu. (2015, b). Supplement to Two Papers on Multiple Bubbles. Manuscript available from: https://sites.google.com/site/shupingshi/TN_GSADFtest.pdf?attredirects=0&d=1.
- Phillips, P.C.B., Wu, Y., and J. Yu. (2011). Explosive behavior in the 1990s Nasdaq: When did exuberance escalate asset values? *International Economic Review*, 52, 201-22.
- Phillips, P.C.B., and J. Yu. (2009). Limit theory for dating the origination and collapse of mildly explosive periods in time series data. Unpublished manuscript, Sim Kee Boon Institute for Financial Economics, Singapore Management University.
- Phillips, P.C.B., and J. Yu. (2011). Dating the Timeline of Financial Bubbles During the Subprime Crisis. *Quantitative Economics*, 2, 455-491.
- Phillips, P.C.B., Shi, S., and J. Yu. (2014). Testing for Multiple Bubbles: Historical Episodes of Exuberance and Collapse in the S&P 500. Working Paper, Yale University.
- Shi, S. (2011). Econometric Tests for Nonlinear Exuberance in Economics and Finance. PhD thesis, The Australian National University.
- Shi, S. (2013). Specification sensitivities in the Markov-switching unit root test for bubbles. *Empirical Economics*, 45, 697-713.
- Van Norden, S. and R. Vigfusson. (1998). Avoiding the pitfalls: can regime-switching tests reliably detect bubbles? *Studies in Nonlinear Dynamics & Econometrics*, 3, 1-22.

Customer Perception Towards Refurbished Products in India

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Abstract

Multinational corporations are launching top of the line products to lure the Indian customers, but a niche segment that is seeking refurbished and second-hand products in India is not being targeted effectively. The refurbished goods industry in India still largely lies in the hands of the unorganized sector. These products have been flourishing in the Indian market because of factors like affordability and shorter upgrade cycle. Refurbishment presents opportunities for designers to improve the sustainability of new and old products via an experiment. The purpose of this paper is to understand different dimensions of the segments which are conducive for targeting, their perception variables and to identify the major underlying factors that influence the purchase intentions of refurbished products in Indian market.

Keywords: Refurbishment, Consumer perception, Purchase intention

Introduction

Buying new products has always been an excitement for all, irrespective of age, gender and the geographic region that one belongs to. Products, especially electronic gadgets rule our lives these days and there is a never-ending conveyor belt of this around us. But with time, some of the new products are getting more expensive and will definitely burn a hole in the pocket. This is when the refurbished market comes to the rescue. The tag “refurbished” does not attract many, but it is a blanket term that covers a lot of potential scenarios. This means that the product has been returned and has been repaired for either a minor or a major defect. The defect could have been a package damage or a cosmetic damage. It could just have been that the customer changed his mind.

The manufacturer will test the product well and make any repairs that are deemed necessary. They will then clean up the product and reset the software as per the factory conditions and then repackage it. The device will look as good as a new one. It will also work every bit as a brand new product. One can end up buying any products that ranges from smart phones, tablets, computers, laptops, cameras and television sets at discounted price as low as 50%. Refurbs are always a small gamble irrespective of the category of electronics that they belong to. It could be an unused device which cannot be resold as new but for all intents and purposes, it is still anew product. On the other hand, one could get a product that is scratched and has a serious problem. In such cases it is how one mitigates the risk. Electronics manufacturers are having separate units to sell these products.

The Indian market is also beginning to see the prominent presence of refurbished products. There are many players in the unorganised sector. Organized retail has also shown indications of the affinity for such products. Online retailers are aggregating sellers of such products.

This paper was an effort to understand the perception amongst Indian customers especially the young generation about the refurbished products. The myth of refurbished being recycled old products is disappearing here.

Review of Literature

India is still a growth story-a big growth story. Even assuming conservative GDP growth of 6 to 7 % a year, we expect consumption expenditures to increase by a factor of three to reach \$ 4 tn by 2025. India's nominal year-over-year expenditure growth of 12 % is more than double the anticipated global rate of 5 % and will make India the third-largest consumer market by 2025 (BCG, 2017). Moreover, India's youth who dominate its 130-million strong urban

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mass, earning \$3,200 (Rs. 21,361) on average per month, will be the key driver of the country's consumption story in the next 5-10 years (Goldman Sachs, 2016). "With a young, tech-savvy population, improved education and rapid growth, India is creating a consumer market deeply tied into mobility, connectivity and most importantly awareness" (Economic Times, 2016). Additionally, 250 million people are set to join India's workforce by 2030.

As a big chunk of the population shifts into the working age group, the offshoot of that is an increase in disposable incomes and conspicuous consumption. This is the most exciting aspect of India's demographic dividend (Thomson Reuters, 2016). Correspondingly, the Indian youth of today with limited purchasing power will transition into major buyers of tomorrow. Also, India will emerge as the next major source of consumer spending growth after China, as its giant population is enticing global brands. The Indian Government has always encouraged environment-friendly technologies and with the current focus on reducing emissions of greenhouse gases and carbon footprint. Moreover, Indian corporates have a green culture as well. However, numerous studies are required to address the gap in green studies especially in the context of young consumers.

Notably, there is limited research on ecological buying, environmental consciousness and green products perception in India. As an emerging economy, understanding factors-influencing consumers' green buying behavior can help in marketing of green products ("Examining the role of consumer lifestyles on ecological behavior among young Indian consumers" Adnan, Arham; Ahmad, Asad; Khan, Mohammed Naved. *Young Consumers*; Bradford Vol. 18, Iss. 4, (2017): 348-377.)

While increasing interest in consumers for greener and more sustainable products offers enough reason to warrant consideration, new environmental laws and regulations in many regions and countries make this both timely and a priority. The manufacturing and operational issues associated with the incorporation of reused and recycled materials are increasingly being addressed by both academia and practice. Consequently, the missing piece is understanding the marketing of products based on recycled and reused materials. Therefore, the importance and relevance of this topic will continue to grow. It was found that there is tremendous variation in both relative price and switching range for different types of products. More specifically, perceived functional risk appears to have a statistically significant impact on consumer purchase decisions. This finding is a critical step to understanding the marketing of products manufactured with recycled and/or reused materials.

The next steps are: to consider the effects of branding, the associated effects of change in perception of a firm's corporate identity, and specific psycho-social variables that affect consumer perceptions and decision making and variables that are critical to understanding functional risk. Through the consideration of these important theoretical questions, we can also gain insights that are important to practice. There is a technique for determining at what price would a version of their product that incorporates recycled and/or reused materials-an important practical contribution since it allows for an economic assessment of greener products. (New or recycled products: how much are consumers willing to pay? Leila Hamzaoui Essoussi; Linton, Jonathan D. *The Journal of Consumer Marketing*; Santa Barbara Vol. 27, Iss. 5, (2010): 458-468. DOI:10.1108/07363761011063358)

Over \$100 bn worth of products are returned from customers to retailers annually (Stock, Speh, and Shear 2002). Other than at the end of life, products are returned relatively soon after distribution. Dowling (1999) shows that up to 35 % of new products are returned before the end of their life cycle. The value of these returns is considerable since they still preserve features and technologies of new products that are currently for sale. When returns come to manufacturers, the right decision must be made to manage these returns profitably. Depending on their quality and the manufacturer's policy, some returns even qualify to be sold again as new products to regain the total margin. Products that have been used or have some defects will be either refurbished and then resold whole or dismantled into parts that are either kept for service or sold.

Refurbished products are those that have been verified by the manufacturer to be as functional as new products. White and Naghibi (1998) described the refurbishment process as complying with the highest standards and giving careful attention to both the interior and the exterior of the product. Electronic products are subjected to rigorous electrical testing to ensure they meet all original manufacturing specifications. Examples of products that qualify for refurbishment are consumer-returned products, off-lease products, products with shipping damage, and over stocks (Silva 2004; Guide *et al.* 2006). From the consumer perspective, buying refurbished products is an

economical way to obtain goods that perform as well as new products. For the manufacturer, refurbished products broaden the market by drawing the consumer who is not willing to pay full price to purchase refurbished products for less. However, there may be an overlap between the markets for new and refurbished products. Consumers in this overlap market will choose between new or the refurbished product based on price and perceived quality.

Many retail product returns can be refurbished and resold, typically at a reduced price. The price set for the refurbished products affects the demands for both new and refurbished products, while the refurbishment and resale activities incur costs. To maximize profit, a manufacturer in a competitive market must carefully choose the proportion of returned products to refurbish and their sale price. We model the sale, return, refurbishment, and resale processes in an open queueing network and formulate a mathematical program to find the optimal price and proportion to refurbish. Examination of the optimality conditions reveals the different situations in which it is optimal to refurbish none, some, or all the returned products. Refurbishing operations may increase profit or may be required to relieve a manufacturing capacity bottleneck. A numerical study identifies characteristics of the new product market and refurbished products that encourage refurbishing and some situations in which small changes in the refurbishing cost and quality provoke large changes in the optimal policy. (Optimal Price and Quantity of Refurbished Products by Jumpol Vorasayan and Sarah M. Ryan - Vol. 15, No. 3, Fall 2006, pp. 369–383)

Refurbishing products, which are increasingly sold in business-to-consumer markets, is a key strategy to reduce waste. Researchers find that consumers' Willingness to Pay (WTP) for refurbished products is low. Strategies for a higher WTP are needed in order to grow consumer markets for refurbished products. Eco-certification of refurbished products may be a key strategy here. Drawing on the consumer WTP literature concerning "green" products, we investigate the impact of independent eco-certificates. Our analysis is based on a survey of 231 potential customers. The results suggest that, across various product categories, the WTP for products with refurbished components is significantly lower. Adding an eco-certificate tends to return the WTP toward the virgin product level. We show that consumers with pro-environmental attitudes particularly exhibit green buying behaviour. The eco-certification is worthwhile because it enhances the business rationale for producing products with refurbished components. (Willingness to Pay for Eco-Certified Refurbished Products: The Effects of Environmental Attitudes and Knowledge Harms, Rainer; Linton, Jonathan D. Journal of Industrial Ecology; New Haven Vol. 20, Iss. 4, (Aug 2016): 893-904. DOI:10.1111/jiec.12301)

According to Hitendra Chaturvedi, founder and CEO of Greendust, "Refurbished products are typically the products that are returned by customers with the return policy or the factory seconds or demo items in retail shops. In Greendust, refurbished product goes through a 50-point quality check before they are sold. Also, we use genuine parts from OEMs during refurbishing. Considering the customer satisfaction in mind, we give a one-year warranty on these products. We also offer buyers a one-year accidental damage and liquid protection in some cases as well as an option to purchase an additional one-year of extended warranty. And then if a customer is not happy for any reason whatsoever, we have a 15-day return policy wherein we can either take the product back, repair and refurbish it again, or even give a 100 % refund."

Research in the area of refurbished products have tried to understand customers opinions about refurbished products and why they would or wouldn't purchase them. Overwhelmingly, the response was positive. Of the individuals surveyed, 94% said they have bought refurbished products in the past three years and 84% felt these products were a good value. Also, 41% of consumers responded that they buy refurbished because they consider themselves "sustainable consumers." Along with the benefits of going green, people are also choosing refurbished products because they meet their needs, products work "good as new," and they allow the customer to try a newer product without the larger financial commitment. One of the top outcomes of the survey is that 81% of consumers would recommend buying a refurbished item to their friends or family. When asked about the unique places' consumers have used refurbished products, 7% responded that they have used a refurbished product snorkelling or scuba diving in the ocean. In addition, one of the interesting anecdotes we learned was about a volunteer firefighter who uses a refurbished helmet camera when fighting fires and helping the community. Refurbished products are a great way to be a sustainable consumer and to also try out newer gadgets and save money. (Consumer Survey results proves refurbished products are "In" – Liquidity Services Blog)

Objectives of the Study

1. To understand the concept of refurbished products and to assess its relevance in the current market place.
2. To get an insight into the existence of organised players in the business of refurbished goods and understand their business models.
3. To identify the top three refurbished product categories purchased by Indian consumers.
4. To study and analyse the factors that determine consumer willingness to buy such products.

Research Method

Our research on Consumer perception on Refurbished Products is a descriptive research as we want to know what the awareness levels for refurbished products is and what are the top product categories in refurbished market. Generally, there are two types of research methods, i.e., qualitative and quantitative. We are considering quantitative approach of research for our survey because it generates numerical data and hard facts, by employing statistical and mathematical techniques. Saunders, Lewis and Thornhill (2000) suggests that quantitative research can be faster as compared to qualitative as it is possible to forecast the time schedule, whereas qualitative can be relatively long in duration.

Data Collection

There are two types of collecting data viz. Primary method and Secondary method. Primary method involves usage of various techniques like interviews, questionnaires and surveys, observations etc., to gather data about any incident whereas secondary method involves collecting data from journals, magazines, reports etc. We have considered Primary type of data collection technique and have used questionnaire method to collect data from respondents directly because our respondents are geographically scattered.

Sampling

In general, there are two types of sampling techniques i.e. non-probability (non-random) sampling and probability (random) sampling. Types of non-probability sampling are Convenience Sampling, Judgemental sampling, Quota Sampling and Snowball Sampling. We used Convenience sampling. Convenience sampling attempts to obtain a sample of convenient elements based on the convenience of a researcher, i.e. Elements which are readily available. Often, respondents are selected because they happen to be in the right place at the right time.

Sample Size

We chose a sample of 160 respondents who are a mix of various age groups from 20 to above 43 years of age who have access to the internet. Questionnaire was circulated online to all the respondents because of which we received prompt replies. The questionnaire is constructed in easy language in order to avoid ambiguity.

Questionnaire Design

The questionnaire was chronologically designed to meet the research objectives. All the questions were designed taking into consideration the theme of the topic that is “Customer perception on Refurbished Products”. The questionnaire was designed in Google Forms. The questionnaire initially has demographic details of the respondents like their age group, gender, name, e-mail address. The questionnaire was of two parts:

- **Part-A:**

This part contained demographics and a question whether the respondent is aware of what refurbished products are. If the respondent is not aware of the products, then the questionnaire would terminate. If the respondent is aware of the refurbished products, then they would move to the next section.

- **Part-B:**

This part contained of various questions which were related to refurbished products. There is a total of 10 questions that the respondents must answer after which the survey would terminate.

Data Analysis:

I. Age Group

Age Group	No. of Responses	% of Responses
Below 20	1	0.6
20-31	149	93.1
32-42	5	3.1
Above 43	5	3.1
Total	160	100

Table 1

Source: Primary Data

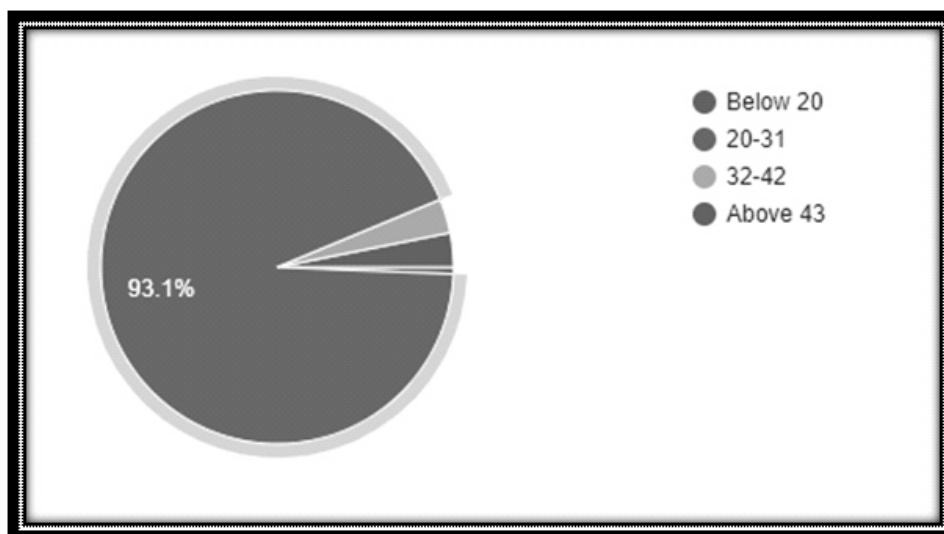


Figure 1

Source: Primary Data

Gender	No. of Responses	% of Responses
Male	70	43.7
Female	90	56.3
Total	160	100

Table 2
Source: Primary Data

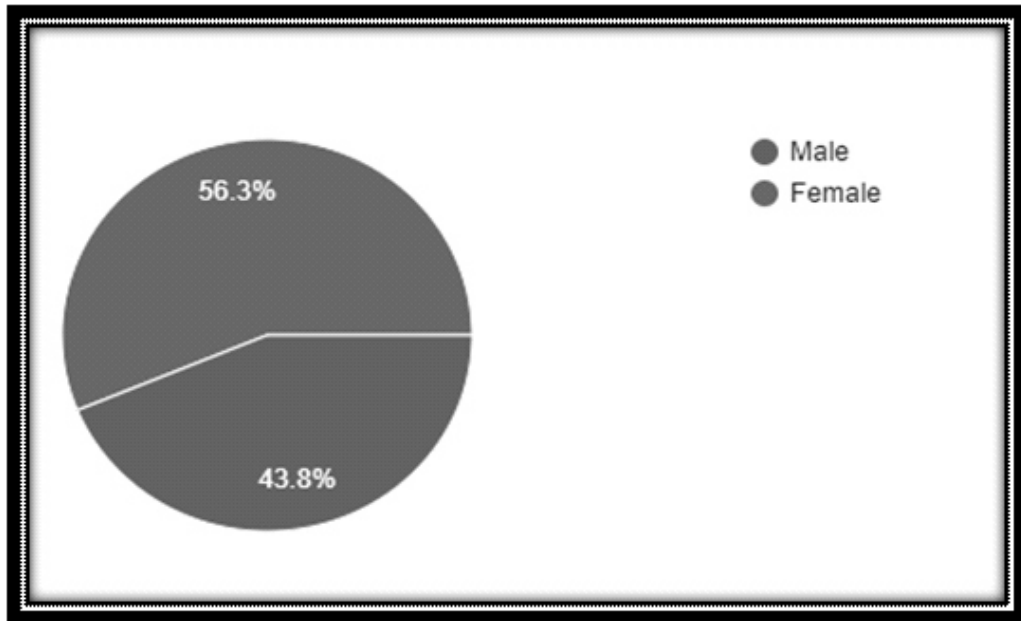


Figure 2
Source: Primary Data

Inferences:

According to the demographic profile, 93.1% of the respondents belong to the age group of 20-31 years, 6.2% of the respondents collectively belong to the age group of 32-43 years and above and 0.6% of the respondents are from the age group of below 20. Among the respondents, 90 are female and 70 are male.

Q1. Are you aware of what refurbished products are?

Answer.

Options	No. of Responses	% of Responses
Yes	126	78.8
No	34	21.3
Total	160	100

Table 3
Source: Primary Data

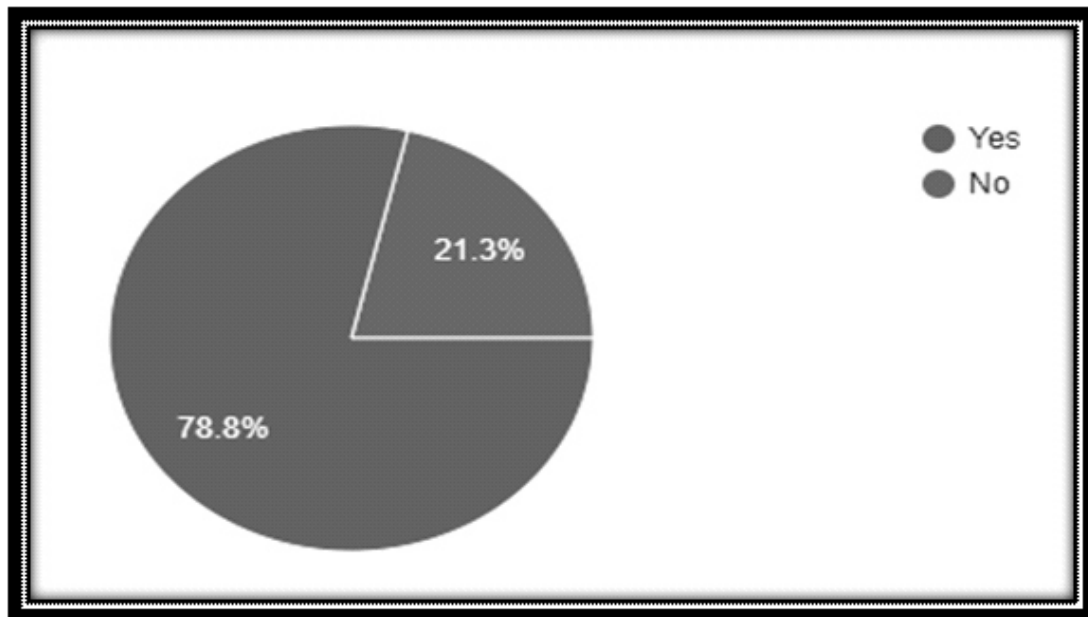


Figure 3
Source: Primary Data

Inferences

This question was asked to know the general awareness of refurbished products in the target audience. The 21.3% of the respondents who were not aware of the refurbished products had to terminate the survey and the rest 78.8% of the respondents who were aware of the refurbished products went ahead and answered the remaining questions. Therefore, from here on the number of respondents that will be referring to will be 126 as they are the ones who answered the remaining questions.

Q2. What do you think refurbished products are? (Select all that apply)

Answer.

Categories	No. of Responses	% of Responses
Second Hand Products	89	70.6
Factory defectives	51	40.5
Demo items used in retail shops	25	19.8
Products damaged in Transit	28	22.2
Products rejected by the customers	48	38.1
Products rejected by the Quality control	31	24.6

Table 4
Source: Primary Data

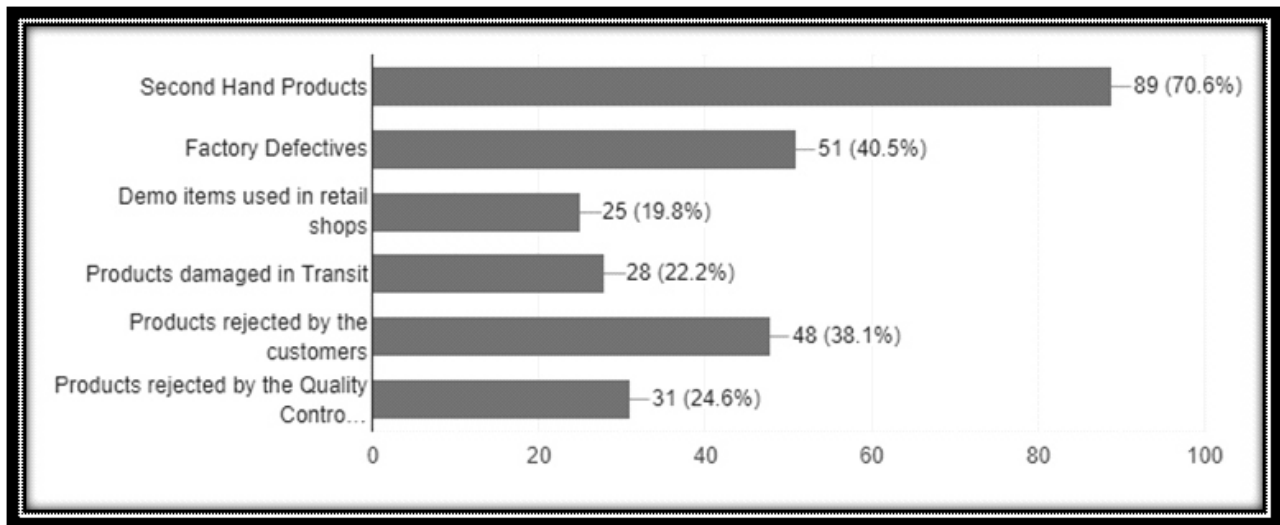


Figure 4
Source: Primary Data

Inferences

When asked an opinion on what according to them are refurbished products 89 of the 126 respondents perceive refurbished products to be 'Second Hand Products' and 51 of them think that these products are 'Factory Defectives'. Also 'Products rejected by the customers' category received 48 votes. Apart from these top 3 categories 31 respondents think that refurbished products are 'Products rejected by the Quality control team'. The other perceptions about refurbished products are that these products are used as demo items in retail shops and then are resold by these shops again.

Q3. How likely are you to buy a refurbished product?

Answer.

Options	No. of Responses	% of Responses
Not Likely	59	46.8
Somewhat Likely	66	52.4
Very Likely	1	0.8
Total	126	100

Table 5
Source: Primary Data

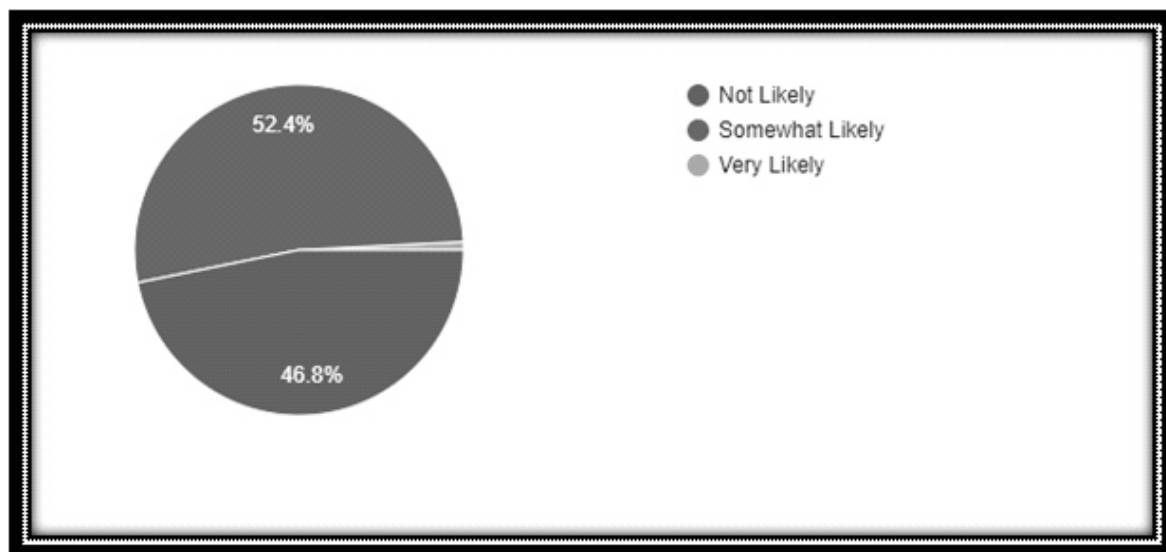


Figure 5
Source: Primary Data

Inferences

Only 66% of the respondents are somewhat likely to buy refurbished products. The rest 59% are not likely to buy refurbished products at all. Amidst these group there is a third group which is very likely to buy refurbished products, they represent only 0.8% of the total respondents.

Q4. How do you rate the following attributes that will be considered by a customer before buying a refurbished product?

Answer.

Factors/Importance	No Defects	Warranty of the product	The time period it was previously used for	Price	Others
Not Important	5	5	2	0	32
Somewhat Important	19	42	41	36	62
Very Important	102	79	83	90	32
Total	126	126	126	126	126

Table 6
Source: Primary Data

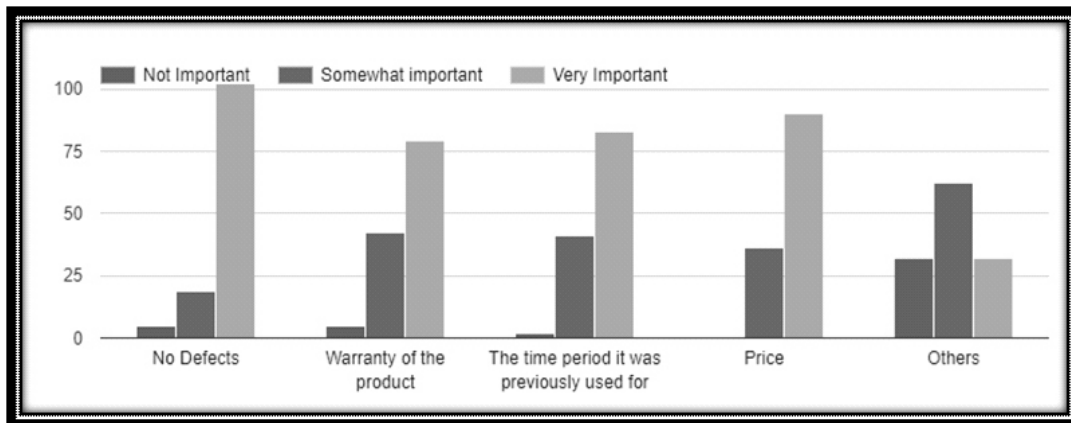


Figure 6
Source: Primary Data

Inferences

- No Defects:

Out of the 126 respondents who took the survey 102 of them regard 'No Defects' as one of the most important attributes that a customer will consider before buying a refurbished product. In the remaining 24 respondents 19 of them think that this attribute is somewhat important and 5 think that this attribute is not important at all.

- Warranty of the product:

Out of the 126 respondents who took the survey 79 of them regard 'Warranty of the product' as one of the most important attributes that a customer will consider before buying a refurbished product. In the remaining 47 respondents 42 of them think that this attribute is somewhat important and 5 think that this attribute is not important at all.

- The time period it was previously used for:

Out of the 126 respondents who took the survey 83 of them regard 'The time period it was previously used for' as one of the most important attributes that a customer will consider before buying a refurbished product. In the remaining 43 respondents 41 of them think that this attribute is somewhat important and 2 think that this attribute is not important at all.

- Price

As mentioned earlier in the review of literature that the Indian customers are price conscious out of the 126 respondents who took the survey 83 of them regard 'Price' as one of the most important attributes that a customer will consider before buying a refurbished product. The remaining 36 respondents think that this attribute is somewhat important.

- Others:

Out of the 126 respondents who took the survey 62 of them regard other factors as somewhat important for a customer to consider before buying a refurbished product.

Q5. What according to you are the top 3 product categories in a refurbished/recycled market? (Select any 3)**Answer.**

Product Categories	No. of Responses	% of Responses
Mobile Phones	95	75.4
Laptop and Peripherals	78	78
Furnishings	38	38
Home Appliances	50	50
Consumer Electronics	41	41
Apparels and Shoes	9	9
Automobiles	57	57
Others	10	10
Total	378	

Table 7
Source: Primary Data

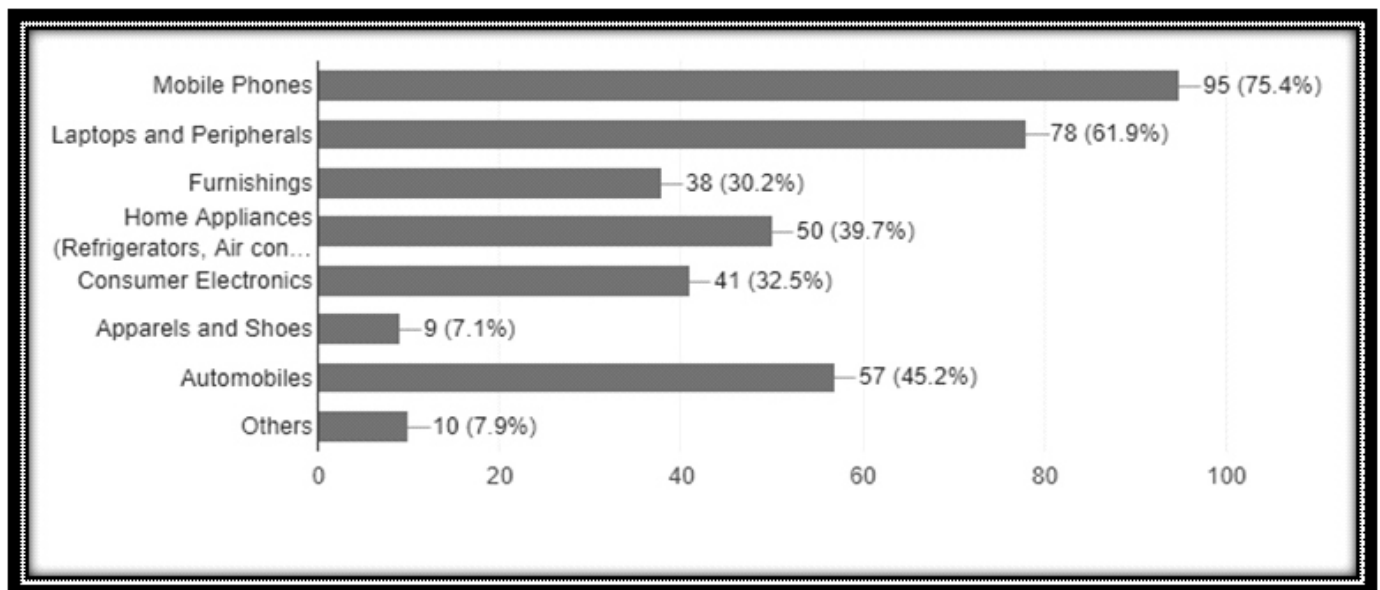


Figure 7
Source: Primary Data

Inferences

This question displays the top three categories in a refurbished/recycled market as per the respondents of the survey. Respondents were given a list of product categories and were asked to select any three companies that they think, sell refurbished products. 95 respondents think that 'Mobile Phones' is the first product category that are sold in a refurbished market. Following the Mobile Phones category is the 'Laptops and Peripherals' category for which 78 respondents voted and 3rd is the 'Automobiles' category that received 57 responses. Other categories like 'Home Appliances', 'Consumer Electronics', 'Furnishings', 'Apparels and Shoes' stood in 4th, 5th, 6th and 7th respectively positions according to consumer perceptions.

Q6. How safe are refurbished deals for the buyers?**Answer.**

Level of Risk	No. of Responses	% of Responses
Very Risky	5	4
Risky	62	49.2
Not Risky	48	38.1
Safe	10	7.9
Very Safe	1	0.8
Total	126	100

Table 8
Source: Primary Data

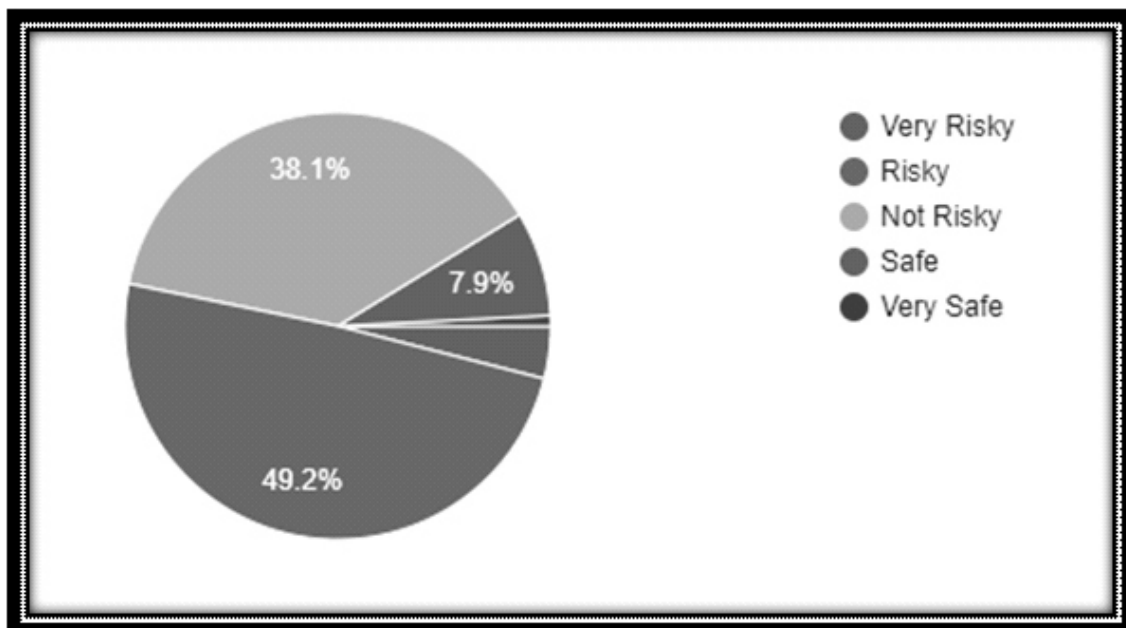


Figure 8
Source: Primary Data

Inferences

Although 38% of the respondents find refurbished deals not risky more than 53% of the respondents consider these transactions as risky for the consumers. This shows the level of confidence they have on refurbished products. More than 65 respondents think that these are riskier transactions.

Q7. Would you rather buy a refurbished product from ?**Answer.**

Categories	No. of Responses	% of Responses
Local Vendor	18	14.3
Reputed Company	108	85.7
Total	126	100

Table 9
Source: Primary Data

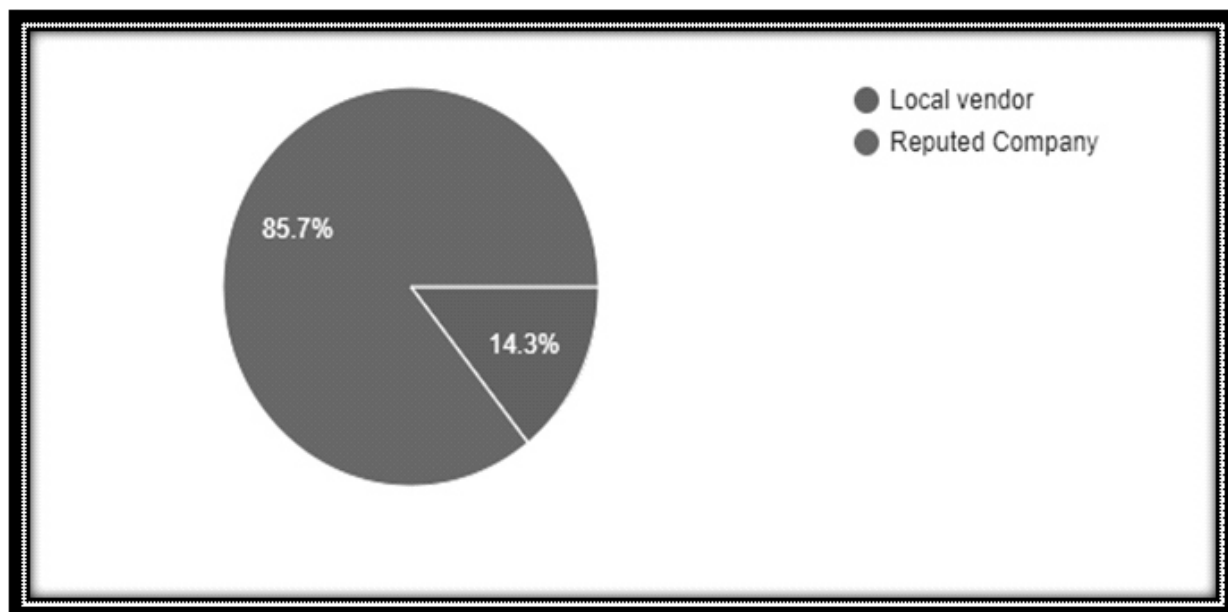


Figure 9
Source: Primary Data

Inferences

More than 85% of the respondents want to buy these products from a well reputed company because they think these products are riskier in transactions. When asked would you buy a refurbished product from a local vendor or reputed company only 18 out of 126 respondents voted for a local vendor.

Q8. Which market according to you contributes to the highest percentage of refurbished products sales in India?

Answer.

Categories	No. of Responses	% of Responses
Online	80	63.5
Offline	46	36.5
Total	126	100

Table 10
Source: Primary Data

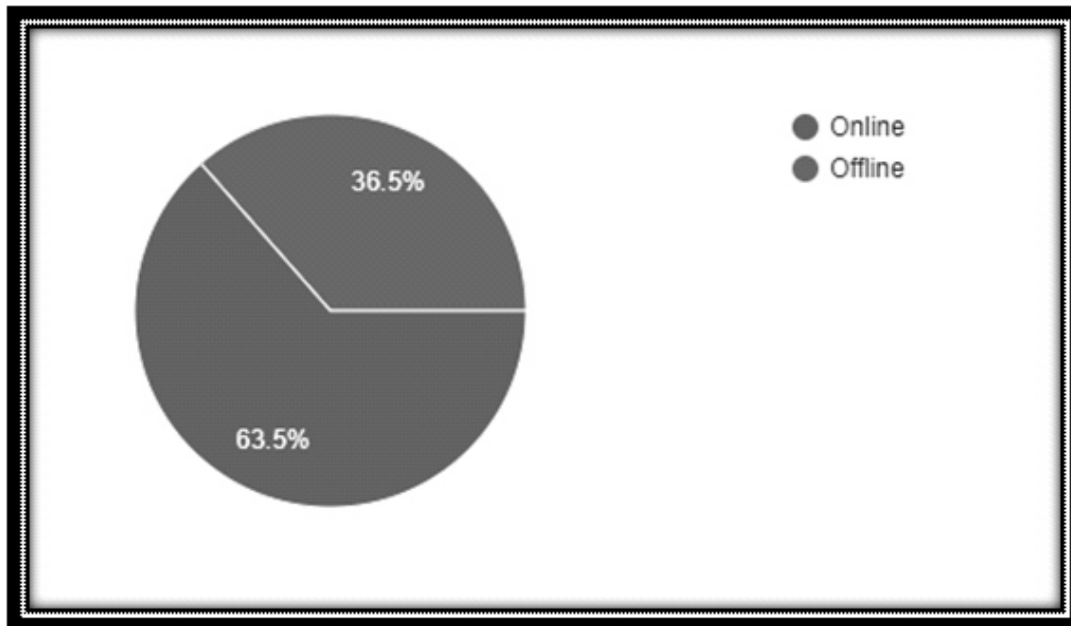


Figure 10
Source: Primary Data

Inferences

When asked for an opinion on which market contributes highest to the sales refurbished products, 63.5% of the respondents recorded that Online market contributes higher to the sales than the offline market. Only 46 respondents out of 126 agree that offline market contributes higher to the sales of the refurbished products.

Q9. What are the companies that you are aware of that sell refurbished products?

Answer.

Companies	No. of Responses	% of Responses
Amazon	72	57.1
Ebay	56	44.4
Flipkart	41	32.5
Snapdeal	27	21.4
OLX	91	72.2
Quickr	71	56.3
Greendust.com	6	4.8
Overcart.com	7	5.6
Gobol.in	3	2.4
Local Companies	23	18.3
Others	21	16.7
Total	418	

Table 11
Source: Primary Data

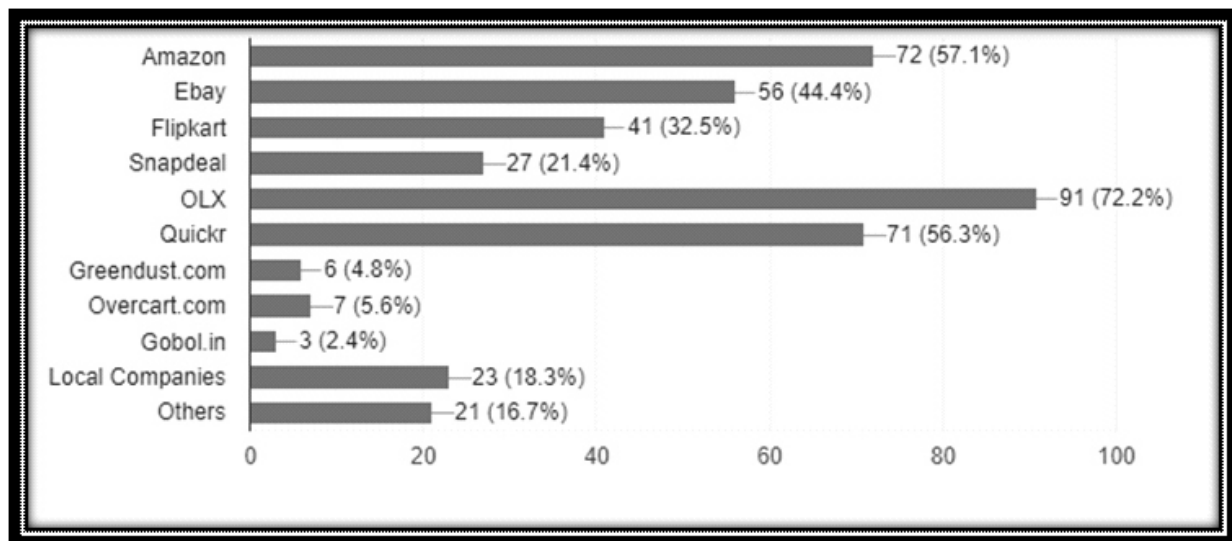


Figure 11
Source: Primary Data

Inferences

This question shows an exhaustive list of companies that sell refurbished products. Respondents were asked to tick all those companies that they are aware of, that sell refurbished products. OLX is the company that is topping the list with 72.2% of respondents knowing about that it sells refurbished products. Second and third in the list are Amazon and Quickr respectively with 57% and 56% of the respondents knowing about them that they sell refurbished products. Other E-Commerce companies like Ebay, Flipkart, Snapdeal, etc. were also present in the top of the list.

Q10. Rate the attributes on the scale of 1-5 that you think a customer takes into consideration for buying a refurbished product over a new product. (1 being the lowest and 5 being the highest)

Answer.

Attributes	1	2	3	4	5	Total
Affordability	10	16	24	34	42	126
Best Discounts & Deals	7	19	28	37	35	126
Warranty	11	10	37	32	36	126
Quality	11	13	31	30	41	126
Eco-friendly	13	27	35	34	17	126
Better Alternatives/Ranges	9	21	34	41	21	126

Table 12
Source: Primary Data

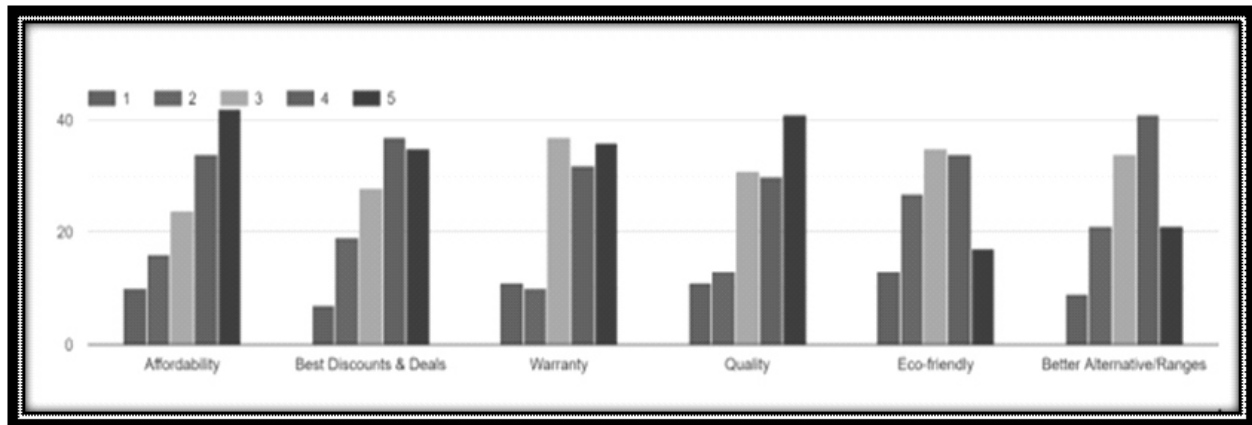


Figure 12
Source: Primary Data

Inferences

Respondents were asked to rate on a scale of 1-5 (1 being the lowest and 5 being the highest) few attributes that a customer takes into consideration for buying a refurbished product over a new product. Following are the attributes:

- **Affordability:**

42 respondents out of 126 gave a 5 rating to the affordability as an important attribute and 34 of the respondents rated gave it 4 rating. This shows that affordability is one of the main attributes why respondents prefer refurbished products over the new ones.

- **Best Discounts and Deals:**

37 respondents out of 126 respondents gave a 4 rating to this attribute followed by 35 respondents giving a 5 rating. This shows that although discounts and deals are not the main attributes but yes, they are taken into consideration when a customer buys refurbished product over a new product.

- **Warranty:**

Warranty as an attribute is given 3 rating by majority of the respondents which means that this attribute is not that important for a customer buying refurbished product over a new one.

- **Quality:**

Quality is considered one of the main attributes because it was rated 5 by 41 respondents. This is very crucial attribute because it is this that decides whether a customer should go for a refurbished product or a new product.

- **Eco-friendly:**

This attribute has got a rate of 3 by majority of the respondents which means that the goods that are bought as refurbished product need not be that eco-friendly.

- **Better Alternatives:**

This attribute is given a rating of 4 by majority of respondents which means that this is not the main attributes but yes, they are taken into consideration when a customer buys refurbished product over a new product.

Q11. How much are you willing to spend on a refurbished product?**Answer.**

Categories	No. of Responses	% of Responses
Equal to the rate of the original product	2	1.6
Less than the rate of the original product	122	96.8
More than the rate of the original product	2	1.6
Total	126	100

Table 13
Source: Primary Data

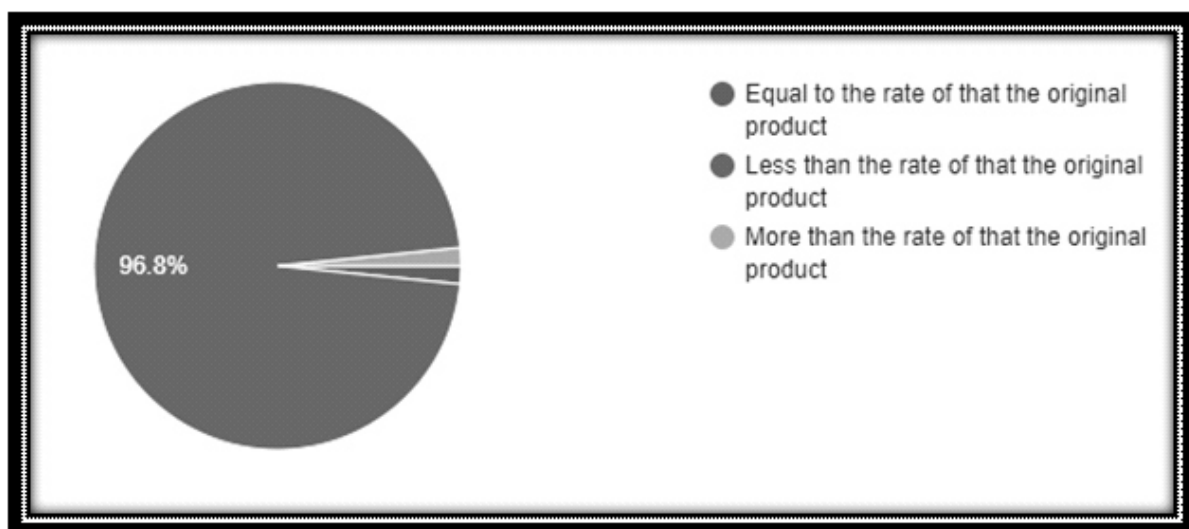


Figure 13
Source: Primary Data

Inferences

When majority of the respondents think refurbished products are second hand products then it is obvious that they will be willing to pay less for the product than compared to the original product, and that is what is displayed. 96.8% of the respondents are not willing to spend equal to or more than the original product.

Findings and Recommendations

- Only 78.8% of the total respondents are familiar of what refurbished products are. There is still a high scope for the marketers to market these products and spread awareness about these products to the general public because out of a sample of 160 respondents there are still 34 respondents who are unaware of such products.
- Refurbished are perceived as second-hand goods or defective goods by majority of the market. This is a misconception. Again, an opportunity for the marketers to change this misconception by using carefully planned and targeted ad campaigns, promotional strategies, etc.
- In the result of the survey it is observed that there are various attributes that a customer would consider before buying a refurbished product. The emphasis would be on 'No Defect' attribute because it is the highest rated attribute according to the respondents, compared to the other attributes.

- It has been observed that more than 53% of the respondents do not consider refurbished deals as safe for the buyers, which is not always true. The CEO of Green dust in an interview mentioned that a refurbished product in their company goes through 50-point quality check before it is sold to the ultimate consumer. Taking this into consideration, awareness can be spread that refurbished products are not always risky.
- The top 3 product categories of refurbished market according to the respondents are 'mobile phones', 'laptop and peripherals' and 'automobiles'.

Conclusion

Refurbished products are a growing resource for consumers to try out new products from their favorite brands. The rise of refurbished market presents an opportunity for the companies to tap this market and quickly come with strategies which will sustain their growth in future. For the young buyer to consider refurbished products, affordability is found to be the key factor. Strategies to target users in this age group may be planned and behavioral segmentation may be effectively put to use to identify potential pockets of the market.

This research was conducted to study consumer perception on refurbished products. More than 93% of the respondents are from the younger generation (millennials) who perceive these products as second-hand ones. This research shows a great scope for marketers to spread awareness about these products and come up with some unique strategies to increase their bottom-line. Where few researchers believe that this industry is lead by unorganized sector, the findings of this research paper shows that 85% of the respondents would like to buy these products from reputed and trusted companies and not local vendors. As most of the respondents are millennials it is obvious that majority of them would like to buy refurbished products online instead of offline and that is why it is seen that more than 65% of the respondents would rather buy these products online. This shows an increasing trend in online space for all the refurbished products selling companies. However, the other respondents who are above the age of 35 would like to buy such products offline from the local vendors.

The research reveals the top three product categories in a refurbished market. The 'Mobiles' category is considered to be the top most product category in a refurbished market followed by 'laptop and peripherals' and 'automobiles'. While there are other product categories also but according to the respondents these are the top 3 product categories in a refurbished market. The research also lays emphasis on various factors that are considered by a buyer before he/she buys a refurbished product. Out of the factors mentioned the respondents consider 'No Defects' as one of the most important factors. Other factors included 'price', 'time period it was previously used for', etc. Marketers can make use of these attributes to increase their sales and profits.

Limitations Study

Sample was collected only from the city of Hyderabad. Thus, the sample may not be geographically representative. The attributes that the customers take into consideration before buying refurbished products were confined to 5 options. These options may or may not be enough to judge the customer perception on refurbished products.

Future Scope

The study only considered few factors of refurbished product market. It did not investigate in detail about the factors. There is a scope of Hypothesis testing and finding out relations between various attributes and finding out various dependent and independent variables using SPSS software. A focused study on the same study with respondents aged between 30-42 may be planned.

References

- “Examining the role of consumer lifestyles on ecological behavior among young Indian consumers” Adnan, Arham; Ahmad, Asad; Khan, Mohammed Naved. *Young Consumers*; Bradford Vol. 18, Iss. 4, (2017): 348-377.
- New or recycled products: how much are consumers willing to pay? Leila Hamzaoui Essoussi; Linton, Jonathan D. *The Journal of Consumer Marketing*; Santa Barbara Vol. 27, Iss. 5, (2010): 458-468. DOI:10.1108/07363761011063358

- Optimal Price and Quantity of Refurbished Products by Jumpol Vorasayan and Sarah M. Ryan - Vol. 15, No. 3, Fall 2006, pp. 369–383
- Willingness to Pay for Eco-Certified Refurbished Products: The Effects of Environmental Attitudes and Knowledge Harms, Rainer; Linton, Jonathan D. *Journal of Industrial Ecology*; New Haven Vol. 20, Iss. 4, (Aug 2016): 893-904. DOI:10.1111/jiec.12301
- Consumer Survey results proves refurbished products are “In” – Liquidity Services Blog
- <https://www.google.co.in/amp/s/www.news18.com/amp/news/tech/refurbished-products-are-not-second-hand-are-great-value-for-money-1008512.html>
- <https://www.bgr.in/news/demand-for-refurbished-and-unboxed-electronics-products-is-rising-survey/>

Perceived Barriers for the Adoption of Digital Payment Services: A Study on South Indian Customers

Dr. Jyothi Chittineni*

Introduction

Technical advancements accelerate the shift from cash transactions to digital payments. Demonetization step up this shift. The government, fintech companies and banks are trying hard to change cash economy to digital economy, there are more than a dozen ways people can pay digitally. Fintech companies initiated mobile wallets like Paytm, MobiKwik, Tez etc, banks are facilitating digital transaction with payment banks, NEFT, RTGS, Unstructured Supplementary Service Data (USSD), Immediate Payment System (IMPS), Prepaid Payment Instrument (PPI) Universal Payment Interface (UPI) for inter-bank transactions, a UPI based mobile application Bharath Interface for Money (BHIM) and a biometric-based payment system started in March 2017 was Aadhaar pay. To mention, these are the few initiatives taken by the fintech companies and banks to support a move to remove cash. In addition, smart phones do no longer function as a medium for communication but rather it functions as a multi functional device. Mobile payments (m-payments) has become an alternative to cash or card payments. Smartphones and e-commerce portals revolutionised the traditional trade and payment methods. The government announced several incentives for digital payments.

However, besides these advancements and incentives an overwhelming amount of retail transactions are cash transactions and only thirty percent of bank accounts are active as per the report by the United States Agency for International Development. Real estate is the second largest employment generating sector in India, over twenty percent of its project cost is in cash. Indian film industry releases around 1200 movies in a year, right from production, distribution and ticketing involves a lot of cash payments. There are roughly 12 mn kirana stores in India, over 90 % of its customers pay in cash. Over 50 % of the wholesale payments are cash-based transactions in the retail sector. There are around 15 to 18 cr chit fund subscribers are there in Indian of which close to 60 % of pay-ins are in cash. The restaurant business is contributing around 2.1% of India's GDP. Most of the restaurants prefer cash payments, as their bills are small amounts and card payment is time-consuming. Vegetable and fruit vendors insist for cash payments, reasons are many like illiteracy, lack of funds to invest on point of sale machines, they must pay daily wages in cash, fear of fraud etc. Another biggest unorganized sector taxi services, over 60 % of payments are in cash. Indian unorganized taxi services are heavily depending on the cash market. Among organized taxi services such as Uber, OLA has 50 % of their receipts are cash billings.

Despite governments initiatives and stated commitment to transform India to cashless economy only 29 % of the bank accounts are active and around 90% of the daily payments are by cash. The government, fintech companies and bank are more focused on providing benefits and incentives for the digital transaction at the same time they are less focused to understand how they can change the behavior of consumers from cash payments to digital payments. Understanding the reasons for repulsive behavior of customer towards the adoption of digital payments systems will help the fintech companies to design and deliver the products which are suitable to the Indian customer. There is good amount of literature available in marketing on repulsive buying and factors causing such behavior. As of now there is no attempt made to understand the factors causing the repulsive buying behavior in adopting digital payment systems. This paper is an attempt to fill the gap by identifying the factors that affect the revolting behavior of customer for adopting digital financial services. Furthermore, for theoretical understanding the study consider the models from innovation resistance theory (Ram and Sheth 1989 and Laukkanen 2016). Consequently, the novelty in this paper will be applying innovation resistance theory to the field of digital financial services. This way the study will provide strategic and marketing recommendations for the digital financial service providers to analyse and overcome the obstacles that the customers are facing with digital payment services.

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Review of Literature

A study conducted by Kemson (2006) found Irregular and low income, lack of availability of suitable financial products, inability of individual are the primary reasons for not accessing the digital financial products. A study conducted on Saudi Arabia found security and privacy are the major concern for the adoption of mobile wallets (Bamasak). On the contrary flexibility and convenience for access and usage are the motivation for the adoption of mobile wallets (Dewan and, Chen LD, (2005) Rathore HS, (2016). A study conducted in Bangalore city (Padashetty, a Kishore KS (2013) found customers perception about ease of usage, cost and trust are the affecting factors for mobile wallets and the author termed these factors are facilitating factors. A study conducted on Punjab state found societal influence, service usefulness, security, expensive pricing, perceived risk, lack of critical mass, complexity in usage are the barriers for adoption of mobile wallets methods (Taheam, Sharma, Goswami (2016). Consumer perceptions about mobile payments and mobile payment technologies are the most important factors that affect the usage of mobile wallets Dahlberg, Mallat, Ondrus, Zmijewska (2008). A study conducted in Finland found that mobile payments adoption depends lack of other payment modes Mallat (2004). Shin, Ziderman (2009) tested consumers acceptance and use of technology models in the context of mobile payments, study found that the customers' attitudes and intensions are affected by his perceived security and trust and demographics of the user has significant influence on the mobile payment adoption.

With this backdrop, the paper aims to understand the factors that are affecting the usage of digital financial services. The study is noteworthy in view of digital India context.

Significance of the Study: Repulsive buying behavior implied negative buying behavior or a feeling of distaste towards a product or service among customers. A study on negative behaviourism is essential to understand, predict and analyse the critical market variation of a product or service. This is an attempt to identify the factors causing such behavior.

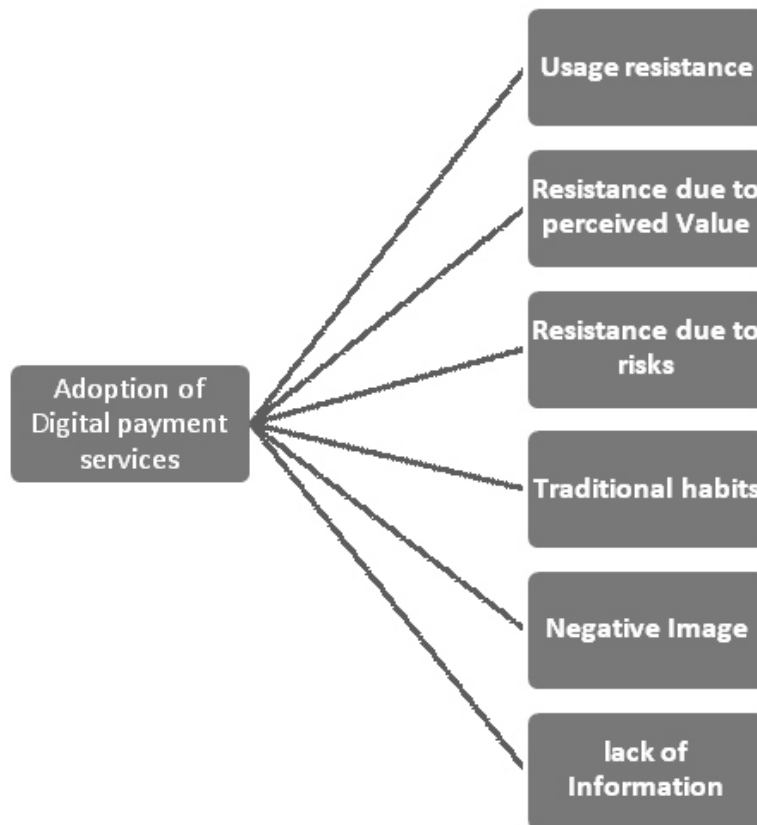
Innovation Resistance Model

The innovation resistance framework was conceptualized and investigated by researchers like Ram and Sheth (1989), Kleijnen (2009) and Laukkanen (2016). So far there is only one study in the context of mobile payments focused on the barriers to adoption was conducted. Therefore, this study will be the first in kind taking different approach in identifying the factors which obstructing the Indian consumers from adopting digital payments. This paper relies on Ram and Sheth (1989) innovation resistance framework, they determined two barriers to adoption, which are functional barriers and psychological barriers, psychological barriers resulted from customers beliefs. Functional barriers include usage resistance, value and risks. Psychological barriers include traditions of the customer and perceived image of the service. This paper also included one more barrier that is product barrier, which include knowledge about the product and value of the product.

- a. **Functional Barriers for Digital Payments:** Functional barriers are related to product or service.
 - I. **Usage Resistance:** New skills are needed to be able to use digital payment service, especially technical services need some efforts from customers, which can cause resistance from customers especially when they are satisfied with their current mode of payment system. Usage resistance arises due to two aspects, one is degree of difficulty, second one refers to degree of change required from the customers traditional habit.
 - II. **Resistance due to Risks:** customers resist due to risk associated with new technologies. The risks associated with new technology are divided into four categories 1. Physical risk-dealing with privacy, confidentiality and personal information, 2. Economic risk- risk increases if price paid for a new technology or service increases, 3. Functional risk- do not function properly, fear of being hacked, power failure, low battery, poor internet connectivity; and 4. Social risk- fear of being judged by others due to the usage of a service or technology.
- b. **Resistance due to Psychological Belief:** Resistance arises due to customer beliefs and traditional habits.

- I. **Resistance due to Traditional Habits:** refers to the fear of replacing the technology with human work.
- II. **Resistance due to Negative Image:** it arises due to negative image associated with technology or service.
- c. **Resistance due to Product:** Resistance arises due to the value of the product and knowledge of the customer.
- I. **Resistance due to Lack of Knowledge:** lack of proper information or lack of knowledge about the product features negatively influences the usage of digital payment services
- II. **Resistance due to Value of the Service:** customers resist the usage of digital payment systems if they perceive the efforts required to utilize the service are higher than the benefits from such service.

Proposed Conceptual Framework



Proposed model for research

Research methodology:

To understand the factors that affecting native the adoptibuying behaviour both quantitative and qualitative research has been adopted. Primary survey was conducted through a structured questionnaire. The respondent's responses were recorded through convenient sampling technique. The variables are measured on a five-point likert scale. The scale is ranging from strongly agree (5) to strongly disagree (1). Total sample size for the analysis was 396. There are 20 variables were chosen to analyse to explore the factors that are affecting the buying behaviour of digital payment users.

Scale Reliability Test: To test the reliability of the scale Cronbach Alpha was estimated, the calculated value is 0.856, it indicates good reliability of the scale. Presented in Table 1

Factor Analysis: Factor analysis was used with varimax rotation to extract the factors that responsible for repulsive buying behavior. The analysis extracted four factors namely functional barriers, psychological barriers and product value barrier shown in Table 2.

To measure the data suitability for factor analysis Kaiser-Meyer-Olkin (KMO) Test has been performed, it measures the sample adequacy for each individual variable and for the complete dataset. The Measure of Sample Adequacy test value must be greater than 0.50 for over all test and for each individual variable. The measured value of sample adequacy test is 0.768, which is acceptable for confirming factor analysis results. The value of Bartlett test of sphericity X^2 is 811.205 presented in Table 2. To test the reliability Cronbach's alpha was estimated, the calculated value is 0.846. This indicates good reliability of the scale. The reliability coefficient range is between 0 and 1.

References

- Rathore HS (2016) Adoption of Digital Wallet by Consumers. BVIMSR's Journal of Management Research 8: 69.
- Padashetty S, Kishore KS (2013) An Empirical Study on Consumer Adoption of Mobile Payments in Bangalore City-A Case Study. Researchers World 4: 83.
- Dewan SG, Chen LD (2005) Mobile payment adoption in the USA: a cross- industry, cross-platform solution. *Journal of Information Privacy and Security* 1: 4-28.
- E., 2006. Policy level response to financial exclusion in developed economies: lessons for developing countries. Bristol: The Personal Finance Research Centre.
- King, R.G. and Levine, R., 1993. Finance and Growth : Schumpeter might be right. *Quarterly Journal of Economics*, 108, pp.717-737.
- Taheam K, Sharma R, Goswami S (2016) Drivers of Digital Wallet Usage: Implications for Leveraging Digital Marketing. *International Journal of Economic Research* 13: 175-186.
- Dahlberg T, Mallat N, Ondrus J, Zmijewska A (2008) Past, present and future of mobile payments research: A literature review. *Electronic Commerce Research and Applications* 7: 165-181.
- Mallat N (2004) Theoretical Constructs of Mobile Payment Adoption. 27th Information Systems Research Seminar, Scandinavia (IRIS), Falkenberg, Sweden, pp: 34-46.
- Shin H, Ziderman A (2009) Student Loans Repayment and Recovery: International Comparisons. *Higher Education* 57: 315-333.

Purpose

The purpose of this paper is to investigate the factors influencing the adoption of internet banking services in Mauritius. Drawing from the technology acceptance model, theory of reasoned action, theory of planned behavior and the extensive literature on demographic profiling of internet banking users, trust and security aspects associated with adoption rate of internet banking, this paper combines various predetermined constructs in one model. The different constructs such as perceived ease of use, perceived usefulness, subjective norms, attitudes, behavioral intentions, security and trust aspects, the level of awareness on internet banking services and demographic variables such as age, income, gender and education into one integrated framework. Hence, the paper will deepen understanding of the specific factors underpinning the adoption of internet banking in Mauritius.

Design/Methodology/Approach

This paper reports upon the empirical findings of the customer survey on the various factors impacting on the adoption of internet banking by the questionnaire method. The Internet Banking Services Acceptance Model (IBSAM) is further validated through a survey instrument administered to 384 respondents visiting various banking

institutions across the nine districts throughout Mauritius to ensure proper geographical coverage. The questionnaires were further processed and analysed with the statistical programme SPSS, by using descriptive and inferential analysis.

Findings

Data analysis showed that perceived ease of use and perceived usefulness have a direct influence on the adoption of internet banking in Mauritius. Results have also indicated that both trust and security aspects are deemed crucial factors to explaining internet banking adoption in Mauritius. Further examination of the inferential analysis highlighted that level of education and income level of respondents may be a major determinant in influencing the adoption of internet banking.

Practical Implications

This research provides banking institutions with significant information on the various aspects that need to be highlighted in their banking communications strategies to increase the adoption rate of internet banking services. Banking institutions need to stress upon the benefits of internet banking services, ease to use, trust and security aspects. The findings of the research provide valuable insights for the banking industry and also urge upon a reshaping of their e-marketing strategy in relation to internet banking services in Mauritius. The research findings revealed that secured web contents and design are key tools to increase the adoption rate of internet banking. Practical recommendations to increase web usefulness and trust, and guidelines to reduce perceived risk are also provided in the present research paper.

Originality/Value

The purpose of the study is to fill up significant gaps in the literature on internet banking landscape in the context of developing countries like Mauritius. The findings are expected to be of significant use to the commercial banks and other financial institutions offering or planning to offer internet banking solutions in the near future. An understanding of the factors influencing the adoption of internet banking services is essential for marketing practitioners so as to capitalize upon the underlying benefits of internet banking and hence, offer banking customers an online experience coupled with a greater level of personalization and customization.

Investors and Executives Perspective towards Debenture Market in Nepal

Rashmi Manandhar & Ajay Kumar Shah

Abstract

The sustainable growth of an economy depends primarily on the amount of labor and capital available within a nation. In a way, strong financial system of a country leads to a better economy. Apparently one of the most important financial instrument, debenture, has not been able to attract the market so far in Nepal. The objective of this study merely has been to find out the factors that affects the decision of both investors and issuers towards debenture. This study has tried to cover the perspective of both sides of the market, i.e., investors and issuers. Embedded research design has been used aiming at finding the real cause of low trading of debenture in Nepal. The study finally has suggested some important measures as investment environment and awareness level in terms of investors and investment alternative, awareness level and regulatory and rating in terms of issuers need focus for development of debenture market in Nepal. In order to make it more effective for the development of overall capital market as well, these results taken from the both sides need a proper implementation in Nepal as soon as possible. At nutshell, the finding from this research states that the Nepalese market on the top of all is not so mature for debenture and the above mentioned areas is a must needed exertion and seeks limelight to the earliest.

Keywords: Debenture market, Investors, Executives, Issuers, Economic growth

Introduction

Every researcher has been researching for the question: Should there be a correct mixture of financial instruments to make a perfect economy or only one arm stable investors are enough? The development of economy depends mostly on the establishment of sound, effective and efficient financial system in a country. History has proved that all; no matter it was an eye catching financial crisis (2008) or Asian crisis (1997), building a strong financial structure was the only way out. So, a well-developed financial system plays a significant role in accelerating economic growth by mobilizing savings and facilitating investment in an adequate manner.

The debenture market is an integral part of financial market which plays a complementary role in developing economy through the allocation of funds to the different deficit sectors. The debenture market of Nepal is too small and is still at early stage of development. The number of debentures being issued in the Nepalese capital market was low compared to other instruments. The equity market had grown in the recent years accounting for 53.4% % but debenture market, in contrast, had no noticeable growth (Asian Development Bank, 2014).

The history of the capital market in Nepal dates back to 1936 in which the shares of Biratnagar Jute Mills Ltd. were floated. In 1937, Tejarath got an entry to facilitate loans to the government employees and was converted into Nepal Bank Ltd. Nepal government introduced the Company Act in 1964 and the first issue of government bonds made in the same year through Nepal Rastra Bank to collect the developmental expenditures. Nepal government announced the Industrial Policy in 1974 and under this policy an institution named Securities Marketing Center (SMC) was established to deal in government securities-development bonds and national savings bonds, and corporate securities of few companies. In recent times, government debenture market is very big compared to the corporate debenture market. At the FY 2016/17, par value of outstanding government debenture stood at 173.3 billion whereas corporate debenture stood at only 9.37 billion. The market shows that corporate debenture consumes only 5% of the total debenture market of Nepal.

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In spite of having long history of more than 53 years, the development of debenture market in Nepal has remained worst. Since the debenture market has been established, it has been a playground for government to overcome excess liquidity and collect fund to solve the problem of fiscal deficit. The par value of corporate bonds outstanding on mid-July was only 0.36 % of GDP. Par value of outstanding corporate bonds and government bonds combined was only 7.02 % of GDP whereas the market capitalization of listed equities and bank loans were respectively 71.44 % and 76.42 % of the GDP on mid-July 2017 (NEPSE, 2016; and Developing Corporate Bond Market for Robust Economy).

Research has shown the significance of debenture market in Nepal and the history has proved their- own part of the importance of debenture market. For instance, why Nepalese market is not accepting the debenture market? Why are investors not interested in this? Why issuers are not trading it? These have been the core subjects for the study. This research paper therefore deals with finding the real reason for the less implementation of the debenture in the market taking perspective of both issuers and investors.

In the context of Nepal, no research has yet been done on this matter taking the perspective from both investors and issuers. This research paper poses on finding out the reason of the same by including various factors. This research paper takes the prospect of the individual investors, institutional investors of their low interest on debenture market and at the time, the prospect of the issuers of having a less interest on debenture market. Although it is not the primary focus of the study, this research paper also examines the determinant that hinders the development of the debenture market in Nepal. So, this research paper has tried to explore the reason for the following research questions mentioned above too as why Nepalese market has less priority for debenture market ? And which factor effect the most to investors and issuers decision towards debentures? In order to fulfill the research questions, the objectives as to analyze the factors affecting investment decision of investors on debenture market and to explore the factors affecting attitude of executives towards debenture issuance have been taken for this research paper.

Answering the question will explain the number of puzzling sections going recently on the market towards the debenture. This research paper has tried to find a substitute or a complementary relation between investor, issuer and regulator that will empirically help the issuers and regulators to formulate a sound debenture market in Nepal. The result coming from the investors' side helps issuers and the result coming from issuers' helps regulators to take an appropriate step for making debenture market a successful one. Hence, this has greater importance in the context of Nepal.

Our financial market is focusing on only one type of investment. That is leading every investor to bear same kind of risk in the market. The situation will be on control if the market will treat you good, but if not every investor would bear the loss and damage will be there to the whole economy. That is why there is a high need of debenture market to keep our economy stable. The whole Nepalese market is mostly linked to the stock. If we will go to the textbooks, you need to have a negative correlation of portfolio to earn higher return for which diversification is a must, this whole thing is missing in our market.

In addition to this, this paper exerts the possible relation between various micro and macro factors that influence investors and issuer decision on debenture market. This study gains a positive effect on the economy on one hand, enables market participants to foster the opportunities available in the market and thereby accomplishing the objectives on the other hand.

In addition to this, this study has believed to showcase the actual Nepalese debenture scenario from the global perspective. This research paper has also believed to help foreign investors to know the Nepalese debenture market so that they can choose the debenture security for generating fund. This study gains a positive effect on the economy on one hand, enables market participants to foster the opportunities available in the market and thereby accomplishing the objectives on the other hand.

This research paper has been divided into five sections. First one includes the introduction part and the basic objective of this study. Second part considers the review of the articles relating with the same sectors around the world and in Nepal. It has been divided into three parts, conceptual framework, review of the articles around the

world and review of the study done in Nepal. Third, considers the details of the methodologies that this research paper is based on. Fourth, it includes all parts of data analysis. It mainly has focused on systematic representation and interpretation of the data that has been collected. The result of this research paper has been included on the last part. Proper recommendation and conclusion has been made with the data that has been collected and analyzed.

Review of Literature

Many studies have been done regarding debenture all around the world. Most of the study done so far has been either based on the secondary data or from the side of institution. The study of real situation taking view of different parties of debenture market is completely missing out. The studies are somehow limited to the desk work which this paper has tried to overcome.

Khalid (2007) studied on the development of the bond market in emerging economies with a focus on Pakistan. The main objective of this paper is to explore the reasons for a slow development of the bond market in emerging economies. Khalid (2007) observed that Pakistan needs to satisfy a set of pre-requisites before some meaningful progress in domestic bond market development is made. Those pre-requisites are regulation to meet an efficient bond market, political instability, lack of complete information about the bond to the investors, high level of fiscal deficit and external and internal debenture. This research paper states the four factors that can slow down the bond market in emerging countries.

Similar findings were extracted through the research done by Leal and Silva (2006), where they included fiscal policy improvement as one of the measure to improve bond market. Also, Yu, Fung and Taml (2007) concluded lack of regulatory reform as one of the major factor that hinders the development of bond market in Asia. Along with that, Fabella and Madhur (2003) considered strengthening the regulatory framework as one of the important initiative to develop bond market in East Asia. The study done on bond market of Nepal stated the same conclusion as regulatory and supervisory insights, developing accounting standard and implementing a clear tax system as significant factors to improve bond market in Nepal (The World Bank, 2008; South Market Bond Markets).

Jahur and Quadir (2010) studied on Development of Bond market in Bangladesh: Issues, status, and policies. The study was undertaken to identify the problems that impede the growth and development of Bond Market in Bangladesh. The study has found that the size of bond/debenture market of Bangladesh is very low as compared to other SAARC Countries; has huge growth potentiality, and identified important factors affecting the growth and development of Bond Market in Bangladesh as: (i) risk and return factor, (ii) liquidity and government policy factor, (iii) issue management factor, (iv) investment policy factor, (v) macroeconomic and regulatory factor, and (vi) market and issue related factor. The study done on Sub-Saharan Africa stated same kind of results. It considers stage of development and size of the bond market, as well as historical, structural, institutional and macroeconomic factors driving bond market development in SSA (Adelegan and Radzewicz-Bak, 2009).

Plummer and Click (2005) studied on Bond Market Development and Integration in ASEAN. ASEAN countries have tried to diversify their heavy reliance on the banking sector in favor of other financial intermediation vehicles, including equity and fixed-income markets. This research paper cleared out that “the bond market development is a priority in all ASEAN countries as a part of their respective financial deepening programs”. Further, they suggested consisting diversification, higher regional cooperation, transparency and various government and market infrastructure measures for proper development of bond. Similarly, Braun and Briones (2006) also stated characteristics of the debenture itself matters for the development of bond market.

Yu, Fung, and Taml (2007) studied on Assessing Bond Market Integration in Asia. This paper looked into the degree of integration of sovereign (government) bond markets in Asia. It provided a survey of indicators and measures to monitor the development, measure progress and assess the state of bond market integration in the region. Their empirical result broadly shows that there is weak bond market integration in Asia and very little progress had taken place since 2003. Further, it found out that lack of cross-investment, liquidity risk and lack of regulatory reforms have hindered the development of the bond market in Asia.

Chabchitrchaidol and Payannukul (2005) also considered free floating bonds as important for consistent

Thai bond market. The research paper also stated global factors including world bond and stock excess returns play an important role in determining the emerging market bond returns. In contrast, overseas cross investment as bank borrowing has been stated as one of the obstacle to the development domestic corporate bond market (Batten and Kim, 2000).

Asian Development Bank also studied on “Nepal: Capital Market and infrastructure Capacity Support Project”, where a separate study on bond market of Nepal has been done. They studied about the determinant that hinders the bond market development in Nepal. The report states the determinants as lack of capacity for efficient public Debenture management, weak legal, institutional and regulatory framework, lack of credible benchmark long term yield, lack of issuers and insufficient investors base, lack of primary dealer system and secondary market, inadequate bond market infrastructure, absence of specialized market intermediaries and credit rating agency, high cost of trading and differential taxation are main cause that slow down the Nepalese bond market (Asian Development Bank [ADB], 2014; SSA: Nepal: Capital Market and infrastructure Capacity Support Project). Gurung (2004) and Mainali (2016) also have stated the importance of infrastructure and secondary market for the development of debenture market in Nepal.

The study on bond market of Nepal was by World Bank on the topic entitled as “South Market Bond Markets”. The report contains context and recommendation for the bond market of each country. The report condemns further improving money market, developing a reliable issuance calendar and improving cash management as a key solution to improve supply side on the bond market in Nepal. On the demand side, broadening investor base could make the market better. On the market infrastructure side, establishing a primary dealer system and introducing a scriptless security settlement system are needed. Lastly on the legal and regulatory framework, enhancing corporate governance, strengthening regulatory and supervisory insights, developing accounting standard and implementing a clear tax system are significant to improve bond market in Nepal (The World Bank, 2008; South Market Bond Markets).

The Methodology

Measures

This paper attempted to find the core variables that influence the decision of both investor and institution in the debenture market of Nepal. Major variables have been undertaken through the findings of the literature review. The factors below have been from the articles above in the literature review linking the context of the Nepalese market. Also, the study done by the World Bank (2008), Asian Development Bank (2005), and International Monetary fund (2010) has been given more emphasis and it relates closely to the Nepalese market. Most of the factors have been taken to evaluate from these studies.

The measures have been taken in order to accomplish the given objective and meet the interest of this research paper. Specifically, the investment decision of investors have been measured taking investment alternative, awareness level, regulatory and rating and investment environment whereas the issuance decision of executives have been measured taking investment alternative, awareness level, regulatory and rating factors.

Investment Alternative: Investment alternative factor was taken to know the view of both investor and executive. These factors are the one that represents the current environment phenomenon and affect the investment decision on investment of debenture. How the environment is moving towards the financial sector, how the availability of other securities is affecting the investors' decision, investors' behavior towards debenture and this relates the entire factor taking market as a whole. The market-related factors taken for this research paper on the investors' side are dominance of banking stock market, smaller investor base, and moderate economic growth and saving rate.

Likewise, issuers' decision also gets affected by the available other market securities and condition. It is essential to know the market view for debenture on how other securities affect the decision towards debenture and how far the other available securities can affect the issuer's decision to issue debenture. The market related factors taken for study this research paper on the investors' side are proper trading platform for debenture and loan substitution.

Awareness Level: Awareness level was taken to check the knowledge of investor and executive regarding debenture. These factors are related to the kind of risk investor like to carry and how well they are aware about its return. This is one another factor taken to test on how investor decision could vary and to know about the real knowledge they have for debenture. So, factors taken for the test include undefined debenture benefits and lack of knowledge regarding debenture.

On the executive part, it basically test on how well they know about investor's perspective. By the end of the day, they are the one that invests to their security. The character of investors' surely affects the issuer to issue debenture in the market. Those factors taken for the study are public awareness and lack of individual investor.

Regulatory and Rating: Regulatory and rating was taken to know the view of both investor and executive. This is yet another factor affecting the investment decision of investor on debenture. How well government and regulation are been able to regulate the debenture market matters a lot as people invest their money on this. So, the government plays an important role in this. The factors taken for the study includes political instability and credit rate agency.

Further, the issuer has to fulfill the entire requirement to issue the debenture on market. So, the move of the government and the regulatory side affect the decision of the issuer to issue the debenture. The factors include rating company for debenture, criteria to meet for debenture issuance and tax treatment for rating company for debenture issuance.

Investment Environment: Investment environment factor was taken to know the view of investor towards it. This includes the characteristic of debenture itself that affect the investment decision of the investor. Type, nature and basic information about the debenture matters a lot while investing upon it. The factors taken for the study includes no diversity in bond, lack of confidence in debenture market, equal interest return until maturity and limited supply of debenture.

The Data

The sample size taken for this study was of total 160 respondents with unstructured interviews of four market personalities. For the investor, 80 sample size was taken from the individual investors, 40 sample size was taken from institutional investors whereas, for the corporates, 40 sample was taken considering Sekaran (2013).

Individual investors here are the investors who buy and sell securities or mutual funds on their own personal account. The sample size of 80 among those investors has been taken. Institutional investors include insurance companies and mutual funds that invest on different types of securities available in the market. The sample size of 40 institutional investors has been taken in this study. In Nepal, corporate bodies all include banks as they have listed debenture in the market. As 15 corporate bodies that had issued debenture has been the population size for this research on the issuer part. These 40 sample size for issuers contains participant as branch managers, assistant branch managers, finance department heads and treasury department heads.

The data from these respondents are gathered through two structured questionnaire, one for 120 investors and another for 40 executives as mentioned. Personalities taken for the unstructured interview includes four personalities from Nepal stock exchange limited, broker firms and debenture listing banks. Overallly, this paper has tried to cover as many participants as it can that relates the Nepalese debenture market.

Data Methodology

Research design and plan gives a master framework for the study. It further guides the data collection and analysis phase. The research design applied to this study is "Embedded Research Design". This research paper have larger portion of quantitative analysis with the small portion of qualitative session. On the other hand, descriptive and analytical analysis has been taken to tap the relationship between the dependent and independent variables. The data for further analysis has been collected from the respondent through a questionnaire in the printed format. The self-administered questionnaire has been used to draw the conclusion. Also, unstructured interview has been added on

the part of qualitative session. Hence, this paper generates the finding that reached the conclusion for the reason of slow trading of debenture. The method of transcribing, coding, categorizing, the matizing, meaning making and theorizing is used in regard of unstructured interview.

Results and Descriptions

The result obtained from the study is mentioned under two segments: investors' part and executives' part where the statistical data is presented and inferential analysis is tested regarding the hypothesis and their significance to the statement is presented. Hypothesis for investors has checked the significant relationship between investment alternative, awareness level, regulatory and rating, investment environment and investment decision of investor's on debenture. Whereas, hypothesis for institutions has checked the significant relationship between investment alternative, awareness level, regulatory and rating and corporate decision of issuing debenture.

Investors

120 sample sizes of investors were taken with unstructured interview of one of the active investor. Age group percentage of 20-30 years is 32.5%, 31-40 years is 25.8%, 41-50 years is 20% and 51 years and above is 21.7 % respectively. Similarly, 74.2% are male and 25.8% are female. Out of the sample take, 26.7% have invested in debenture which leaves 73.3% not investing in debenture. Lastly, among the respondents 74.2% are male and 25.8% are female.

Table 1: Correlation Analysis and Regression Analysis

	Dependent Variable	Investment Alternative	Awareness Level	Regulatory and Rating	Investment Environment
Dependent Variable	1	.083	.156	.047	.355**
Investment Alternative		1	.046	-.012	.314**
Awareness Level			1	-.039	.150
Regulatory and Rating				1	.289**
Investment Environment					1

** . Correlation is significant at the 0.01 level (2-tailed)

	Beta	T-value	Sig.	VIF
(Constant)	1.349	3.114	0.002	
Investment Alternative	-0.044	-0.417	0.678	1.124
Awareness Level	0.089	1.141	0.256	1.031
Regulatory and Rating	-0.051	-0.617	0.538	1.114
Investment Environment	0.457	3.792	0.000	1.259
R-square	0.140			
F	4.692			
Sig	0.002			

The above table states that investment environment is the only one factor that affects the investment decision of investors towards debenture. Under regression, investment environment provides significant contribution to the investment decision of investors on debenture at 0.000 ($p < 10$). Also considering correlation, the corresponding p -value is 0.000, which is lower than level of significance (α) = 0.05, indicating that there is a significant association between investment decision and investment instrument.

Also while qualitative session was taken, respondent cleared out the true picture regarding the government debenture market. There are 40 debenture listed in the market including both government and corporate debenture. Government debentures are somehow invested by the bank and financial institutions of the market in order to maintain the SLR and stay under the regulation. They keep on investing on the same instrument and hold it rather than trading. That itself makes trading less in the market and individual investors unaware about it. This also adds up on the conclusion that investment environment is the factor that affects the investment decision of investors towards debenture in Nepal.

Executives

40 sample sizes of executives were taken with unstructured interview of four market experts. The respondent shows the distribution of respondent by their position, of which in terms of percentage 22.5% are branch manager, 25% are assistant branch managers, 30% are finance department heads and 22.5% are treasury department heads. Similarly, among the participants 17.5% have 3-5 years of experience, 17.5% have 5-8 years of experience and 65% have 8 years and above experience. Lastly, when they were given a choice of choosing the medium to collect the money, 40% prefer share, 22.5% have prefer debenture and 37.5% prefer fixed deposit.

Table 2: Hypothesis Testing through F Value

Measures	F- value
Investment Alternative	0.023
Awareness Level	0.016
Regulatory and Rating	0.981

The above table states that there is no significant relationship between investment alternative and issuance decision. Since, p -value = 0.023 < level of significance (α) = 0.05, i.e. there is significant relationship between investment alternative and issuance decision of debenture. That means the investment alternative factors affect the decision of the issuer to issue debenture. Also, while f test was taken, p -value came out to be 0.016 which is less than the required level of significance (α) = 0.05 i.e. there is significant relationship between awareness level and issuance decision of debenture.

Also, the view of experts gave the same result while qualitative session was taken under this. The first respondent depicts behavior of Nepalese people as the main problem of unpopularity of debenture in the market. Nepalese people do not have the patience as they want a quick return. So, people do not want to invest on something like debenture where the return will take a year or more to be placed.

Second respondent stated that there is lack of knowledge regarding the debenture to the investors in the market. People are even unaware about the availability of debenture which can be used as a medium as a holding asset. So, lack of knowledge is a major problem. This shows that there is relationship between awareness level and issuance of companies so the hypothesis is rejected.

Lastly, the table states that there is no significant relationship between regulatory and rating and issuance decision. While f test was taken, p -value came out to be 0.981 which is high than level of significance (α) = 0.05, we do not reject H_{07} , i.e. there is no significant relationship between regulatory and rating and issuance decision of debenture. This states that regulatory and rating does not affect much on the decision of issuing debenture in the market.

The view of the expert gives the contrast view. Two of the market experts were interviewed where their views stated that there is a significant relationship with them. First, According to participant, the main reason of having low participants in the debenture market is due to the provisions related to the Company Act.

On the Act number 35 of the Companies Act, 2007, it clearly stated that the company issuing debenture shall appoint "Debenture Trustee". This provision has been made to control the fraud cases which occurred during issuance of debenture earlier. This lead to low participation and trading of debenture as no one wants to take that responsibility. Therefore, it can be said that there is relationship between regulatory and rating and issuance of debenture by the corporate which means the hypothesis related to executive part of regulatory and rating is rejected.

Second, respondent stated that complicated buying and selling procedure of the government debenture to the investors is making debenture unpopular. It can be said that there is relationship between regulatory and rating and issuance of debenture by the corporate which means the hypothesis related to executive part of regulatory and rating is rejected.

Concluding Remarks

The finding from this research hits the three strongest pillars of the debenture market, i.e., investors, issuers and regulatory body. On the investors' side, result states that the Nepalese market is not so mature regarding the debenture and there are many areas that need focus and limelight. First of all, both investors and issuers should get a proper knowledge about debenture and the way it can be used properly. They need to analyze investment factors carefully using the reasonable business knowledge before making an investment or issuance decision.

The executives now from this study should be able to maintain proper procedures to make debenture work in the market as they get to know the side of investors. As investors get affected by the investment environment and awareness level, they should make a proper planning regarding the same. As on investment environment factor, more diversities of debenture shall be issued with the proper knowledge to attract the investors. There is a high need for financial literacy programs for investors in order to make proper profitable investment decisions and explore sources to use debenture appropriately with their portfolio.

Now on the regulatory part, the result states that investment alternative, awareness level and regulatory and rating affect the corporates to issue debenture in the market. Proper policies, procedures, well-managed trading platform and sound frameworks should be made in order to make corporates comfortable to issue debenture in the market. Among all, this study states that the awareness level is the main factor that should be solved to make debenture work in the Nepalese market.

This research paper helps issuers to know the perspective of investors on the market so that they could work on those loopholes and connect more to them. On the other side, this paper helps the regulator to know the perspective of issuers which helps them to develop proper policies and rules. So, every instrument has equal role to play on market to have a stable economy. The result of this research paper has herewith expected to see the changes on current Nepalese debenture market scenario.

References

- Adelegan, O. J., & Radzewicz-Bak, B. (2009). What determines bond market development in Sub-Saharan Africa?(No. 9-213). Washington: International Monetary Fund.
- Asian Development Bank (ADB). (2014). SSA: Nepal: Capital market and infrastructure capacity support project. Philippines: Author.
- Batten, J., & Kim, Y.H. (2000). Expanding long-term financing through bond market development: A post crisis policy task (Working paper 2000_07). Victoria, Australia: Deakin University.
- Braun, M., & Briones, I. (2006). The development of bond markets around the World. Draft version 2.0, February.
- Chabchitrchaidol, A., & Panyanukul, S. (2005).Key determinants of liquidity in the Thai bond market. Bangkok:

Bank of Thailand.

Fabella, R., & Madhur, S. (2003). Bond market development in East Asia: Issues and challenges (Working paper.35). Philippines: Asian Development Bank.

Gurung, J.B. (2004). Growth and performance of securities market in Nepal. *The Journal of Nepalese Business Studies*, 1, 85-92.

International Monetary Fund. (2017). Nepal: Staff report for the 2017 IVconsultation-Debenture sustainability analysis. Washington D.C.: Author.

Jahur, M.S., & Quadir, S.M.N. (2010).Development of bond market in Bangladesh: Issues, status, and policies. *Management Research Practice*, 2(3), 299-313.

Khalid, A.M. (2007). Bond market developments in emerging markets: Prospects and challenges for Pakistan. *SBP Research Bulletin*, 3(1), 44-62.

Leal, R.P.C., & Carvalhal-da-Silva, A.L. (2006). The development of the Brazilian bond market. Rio de Janeiro: Federal University of Rio de Janeiro.

Mainali, S. (2016). Developing corporate bond market for robust economy. Kathmandu: Nepal Stock Exchange Limited.

Plummer, M. G., & Click, R. W. (2005). Bond market development and integration in ASEAN. *International Journal of Finance and Economics*, 10(2), 133-142.

Sekaran, U. (2006). Research methods for business: A skill-building approach (4th ed.). New Delhi, India: Wiley.

Sophastienphong, K., Mu, Y., & Saporito, C. (2008). South market bond markets: Developing long-term finance for growth. Washington D.C.: The World Bank.

Yu, I., Fung, L., & Tam, C. (2007). Assessing bond market integration in Asia (Working paper 10). Hongkong: Hongkong Monetary Authority.

Agile Talent Management Strategies for a Fast-Changing Workplace

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Abstract

The Workplace of tomorrow is going to be radically different from what it has been. Technology, in all its forms, is going to transform the way people work and live. Automation, Artificial Intelligence, Robotics, Augmented Reality, Internet of Things and Block chain technology are soon going to be part of our daily workplace vocabulary, if they are not yet. The technological changes which we believe will slowly takeover the workplace in the future, have already usurped organizational processes and businesses. The workplace is transforming in terms of processes and people too. The question is, how prepared and well-equipped are traditional businesses to adapt to these changes. How should the talent in these businesses reinvent themselves for the ever-evolving, technology driven workplace?

The challenges are many and on multiple fronts. Shortened employment associations, remote work & virtual teams, gig workers and diverse workforce make the challenges even more gigantic. Organizations need to adopt Agile Techniques for their workforce management processes. Fast learning and faster unlearning is the key to success, whether it is the management or an individual employee. Organizations have to be proactive in their outlook and highly receptive to the changing signals. They have to adopt agile strategies from planning their resources to developing their leadership pipeline. This can be an effective solution to the talent management problems of today's business world.

Keywords: Agile, Talent, Performance, Leadership, Acquisition

Introduction

Agile Methodology or Technique is a project management tool, used traditionally by the software industry. The basic principles of Agile focus on improving flexibility and nimbleness for faster response to challenges, both internal and external. Organizations have grown to realize that application of Agile to other functions of management, beyond project management, can actually help them improve their overall performance. Thus evolved the concept of Agile Organizations. Agile is a concept that can be applied to Marketing, Operations Management, Financial Management or Human Resource Management. Application of Agile Management Techniques to Human Resource Management, called Agile Talent Management, has evolved as a new area of interest for HR enthusiasts. This emphasizes on improving organizational policies and systems related to HR for improved performance.

Organizations today have to be nimble and flexible if they desire to keep pace with the fast changing business environment. Agile management, if it becomes the core of the HR processes, can drive the processes to be more effective. Agile HR processes ensure that the different decisions taken are

- Faster
- Accurate
- Multi-dimensional
- Efficient
- Effective

As the business environment turned more chaotic and volatile over the last couple of decades, the human resource function, along with the other business functions, was also impacted. The technology was changing at an unprecedented phase. By the time the employees with the required technical skills could be recruited or developed

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within, the technology would change. The average tenure of work with an organization has come down drastically for many. Employee engagement levels hit an all-time low and attrition rates, an all-time high.

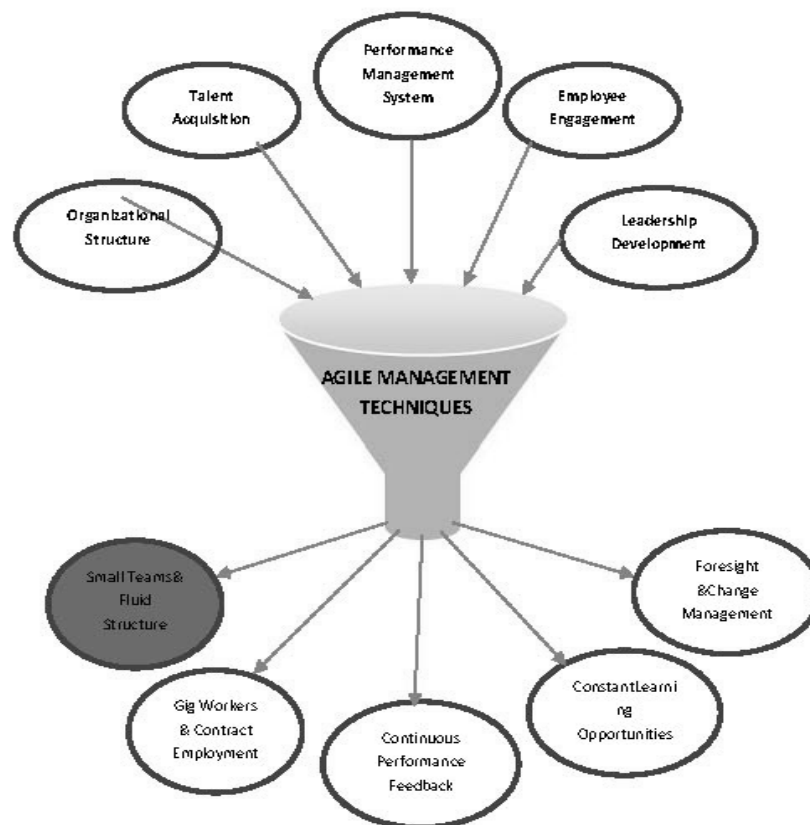
This resulted in an increased need for contingent workers and alternative employment agreements. To execute an agile talent management strategy, organizations have to rapidly shuffle resources among different functions and departments. As business needs fluctuate, adopting nimble and agile HR processes and systems becomes a necessity for organizations to survive and thrive.

Literature Review

Fast decision making and flexibility are necessary for organizations in an unpredictable and complex external environment (Mau petit, 2009). According to Josh Bersin (2014), Agile organizations have three traits-Rapid decision making and execution; a high performance culture and the ability to access the right information at the right time. The agile organization is a concept that combines flexibility, adaptability and coordination as essential features in a world marked by competition, globalization, risks, change and economic imbalances. According to a report published by Capgemini Consulting (2017), an Agile organization requires a change in mind set to respond faster to external factors, while nurturing resilience and a culture of learning.

An Agile organization needs flexible people who accept turbulence as natural - Bran, Tiganoaia, and Ionescu, (2017). Agile transformation brings major changes in all HR functions starting from recruiting to performance appraisal. (Cappelli and Tavis 2018).

Figure 1: Application of Agile Management to HR Functions



Source: Authors

Methodology

This paper is a conceptual paper based on secondary research. A model has been suggested to help understand the transformation of HR processes in organizations, with the adoption of Agile Management Techniques. It offers immense scope to take up case studies of individual organizations that have adopted Agile Talent Management for building business excellence.

Agile Organization

The example of Atento, a CRM and BPO service providing company, is quite apt for discussion, when talking about Agility. It was a \$1.3 bn company in 2012, when Bain Capital acquired it. It figured in the 'challengers' quadrant of Gartner that year. However, the same company landed in the Gartner's 'leaders' quadrant in 2015 and was also among the top 25 Great Places to Work. The company ensures that the transformation process is reignited every year, through its unique campaign. The top leaders are all involved in the first level of the campaign which then leads to a series of workshops and engagement programs for the next level of leadership. This spirit for agile transformation permeates through the entire organization, leading to enviable figures on all fronts- reduced costs, reduced absenteeism and turnover, increased revenues and almost 100 % customer retention.

Adopting Agile Management techniques for designing and implementing HR processes in organizations can bring about a transformation in the way organizations function and perform. A few such processes are discussed here.

Organizational Structure and Processes

Size – Every organization aims to grow its business in size and in profitability. However, at some point, the size itself becomes a hindrance when organizations experience phenomenal growth. Because of the enormity, organizations lose the ability to be flexible and nimble in their response to the business environment. Hierarchies become complex, communication channels get clogged and maintaining good interpersonal relations become more cumbersome. Eventually, the organizations become so huge that complacency sets in, systems become rigid and decision-making becomes turgid. To remove this rigidity and make the organizations more agile, one of the options for organizations is adopting Agile Management Strategies. Redesigning the organization into smaller and well-structured teams can help organizations respond to the VUCA environment much faster and better.

According to a Gallup survey (2013), smaller organizations have more engaged and active employees. Most successful business leaders echo the same sentiment; Amazon has a rule in place that states that any team that needs more than two pizzas to be fed, is too large. Various experiments and studies like the Ringelmann Effect and the LEGO Study by UCLA prove that smaller teams are certainly more productive than larger ones. The reasons can be many. In smaller teams, many negative factors like social loafing, politics and relational loss are minimized. The same factors become operative and dominant in larger teams, thereby affecting the team productivity and performance. Smaller teams are more agile, well-knit and more productive. For example, one of IBM's most successful operating systems, AS400 was built by a very small team. The same IBM's 360 is an example of a large project that became unsuccessful because of the sheer team size. As the project was going down, IBM's management added more resources to salvage the project, but its performance went only further down.

Most start-up organizations today prefer to retain the nimbleness of small teams, even as they tend to grow their business. WhatsApp, at the time of being bought over by Facebook for \$19 bn had just 100 employees. Employees feel a sense of belonging and a stronger sense of contribution in smaller teams. Their decisions and actions are more impactful in smaller teams as they tend to get lost in larger teams. So, even larger organizations are restricting themselves into smaller teams for more effective performance. For example, GSK (Glaxo Smith Kline) has de-scaled its research teams for better results. It has smaller teams now, of typically 8-16 scientists to ensure innovative solutions with enhanced speed of results. But, can organizations restructure their teams without major challenges to the employee outlook and morale?

Organizations should strive to drive a culture of agility. Teams must be formed and disbanded without much ado. Sharing of resources among the different teams should be smooth as it helps improve the efficiency of

organizations and reduce HR costs. Organizations will have fewer resources on the bench as the mantra is of optimum utilization of resources. Learning – unlearning- re-learning is a necessity for today's workforce; this should become a normal for employee in the organization. They should equip themselves with requisite skills and be agile and mobile. They should always be willing to take up head-on, any new challenges that come their way. This is the only way to foster innovation and excellence.

Modern day organizational structures are doing away with rigid borders and limitations. They are becoming more fluid, willing to make the necessary changes in the organizational processes and systems, whenever necessary. Hierarchies are no longer as important as they used to be, as decision-making power gets decentralized. Open two-way communication spells success as it also leads to enhanced employee engagement.

Talent Acquisition

The challenges on the human resource planning front are many for today's HR teams. The impact of external factors is quite challenging as it is not only unpredictable, but is also multi-dimensional. Predicting the employee attrition, retaining the top performers and keeping them engaged, while combating the external challenges like competition, technological and global changes, market dynamics, demographic vicissitudes, make the job of an HR professional quite exciting and challenging at the same time.

Planning and developing the leadership pipeline is a task in itself in the age of short-term employment agreements. The plight of succession planning in an age where working for three years with the same company is an achievement, can only be imagined. So, developing leaders and managers within the organization is as humungous a task as finding competent workers outside the existing workforce.

Finding the right resources – candidates who are a perfect fit, who have the right knowledge-skills and attitude, who are productive and who can be engaged with the organization for a good period of time- is an indomitable challenge for organizations today. Organizations have been innovative in coming up with a relatively easy solution to counter this challenge. That is the idea of gig-workers or contract workers or freelancers. Whatever might be the term used, the Gig economy, where most workers are temporary or contract workers is going to become the order of the day soon.

Hiring of freelancers or gig workers gives organizations a lot of flexibility and agility. It helps them ease the burden of excess workforce during lean periods and allows them hire people with niche skills only when required. The HR costs of organizations can be controlled enormously and the workers also enjoy the flexibility. Technology plays a very important role in finding and employing workers for shortened periods and small work assignments. Today's millennial workforce that gives importance to experiences than accumulating assets, wants to spend more time traveling and seeing the world. This agile talent management helps them enjoy life, the way they desire, yet providing them the required monetary sources comfortably.

Performance Management

Earlier, and even today in many organizations, performance goals are rigid. The role of the employee in finalizing the KRAs was quite limited. And then, the time lines were also long, half-yearly or annually. The employee contribution is measured in man-hours or work-days. However, when it comes to assessment of their contribution, the period taken into consideration is in months and years. This makes the entire job dreary and unexciting for the employee. Organizations have realized that the age-old annual performance reviews do not serve the purpose. They have realized that they need to be more agile and futuristic.

According to a survey by Deloitte, 79% of global executives had rated agile performance management as an organizational priority. The focus has shifted to continuous feedback and regular reviews. They emphasize is on how can something be done better in the future rather than what could have been done differently in the past. This paradigm shift in performance management in organizations is in alignment with the principles of Agile.

Employee Engagement

Employee Engagement in organizations, logically doesn't have a 'start' and a 'stop'. It is a continuous on-going process as more and more organizations have started realizing. Most modern organizations are shifting to a continuous feedback system, with the help of technology and tools. A simple question that pops up on the screen as an employee logs in, enquiring how he/she's feeling, can provide the organization valuable insights on the employee engagement levels. Necessary steps can then be taken to improve the engagement levels of the employee. Analytics can be used to understand the trends in engagement levels across time, levels and functions. HR Analytics can also provide insights on what can be the most probable reason for the disengagement of each of the individual employees.

Simple trackers that tell you how much time an employee spends in the cafeteria or smoking zone, send signals to the management on the disengagement of an employee. Wearables, which are seen by some as a little controversial, have managed to garner great employee support. They serve the dual purpose of enhancing employee well being and employee engagement as well. Organizations are offering wearables at zero or reduced cost and sustaining employee interest with the help of some contests, events and group goals. Employees feel more engaged as they feel their well-being matters to the organization. Their being healthier, both physically and mentally makes the workplace happier and more productive.

Leadership Development

Organizations always had a different concept of leadership success. If someone said that Microsoft grew by leaps and bounds under the leadership of Steve Ballmer, nobody would perhaps negate it. The numbers spoke, the net income of the company tripled during his tenure and gross margin was more than 70% when he left. However, Bill Gates, the Founder and CEO of over 25 years, was not very happy; the stock price of Microsoft only vacillated for over 14 years under Ballmer, with almost no growth. He hunted for a more capable leader, who can steer Microsoft onto the path of rediscovery, while transforming it into a more competitive company. Satya Nadella, who spear-headed the success of Microsoft's cloud business was handed over the charge. Nadella was hands-on and spent long hours every week with his top line. He transformed the way Microsoft works as an organization. He realized that the different product teams in the organization worked in silos and there was no knowledge sharing. With some systematic and rigorous changes, there is immense knowledge and resource sharing that happens now in Microsoft.

Leaders need to be agile in redefining the organizational goals and objectives in response to external changes. They need to be agile in transforming the organizational processes and systems. And, they need to be agile in developing the next line of leadership. Agility is not just about being flexible and nimble. It is also about having the foresight. It is also about having the resilience to bounce back in case of a failure. It is not just about responding but also about visualizing the future. It is about creating a culture of Agile Management. That makes Agile Management and Leadership inseparable.

Conclusion

Nadella also realized that building ambitious products with little inputs or feedback from customers can result in huge losses to the company. So, he brought in agility into the entire system. Inputs from customers are sought and their feedback incorporated into the design of Microsoft products at the design stage itself. This prevents loss of resources on vain products that can be disasters when launched. This just goes to say that incorporating the principles of Agile Management across all functions of business would lead to excellence. Agile management techniques have transformed the way organizations do business in the VUCA world, enabling them to be nimble, flexible and resilient. The principles of Agile Talent Management are great enablers for the human resource function of any organization. They enhance the overall organizational performance as recruiting, retaining and engaging talent becomes easier and efficient. The agile systems, processes and structures give immense scope for the organization to not only respond to challenges but to foresee them, and be prepared to take them head-on.

References

1. Bersin, J. (2014). Creating Agile Organizations. *Leadership Excellence Essentials*, 31(2), 11. Retrieved from <https://search.proquest.com/docview/1511120330?accountid=147271>.
2. Bran, C., Tiganoaia, B., & Ionescu, S. (2017). The Impact of Agile Approach of Organizations on Management Flexibility. Paper presented at the (8) 335-344. Retrieved from <https://search.proquest.com/docview/1990424418?accountid=147271>.
3. Brin, D. (2018). How agile is transforming the way business is done. *HRNews*, Retrieved from <https://search.proquest.com/docview/2014500650?accountid=147271>.
4. Cappelli, P., & Tavis, A. (2018). The new rules of talent management: HR goes agile. *HRNews*, <https://search.proquest.com/docview/2091241560?accountid=147271>.
5. Gothelf, J. (2017). How HR can become agile (and why it needs to). *HRNews*, Retrieved from <https://search.proquest.com/docview/2023413634?accountid=147271>.
6. Haines, T., Idemudia, E. C., & Raisinghani, M. S. (2017). The conceptual model for agile tools and techniques. *American Journal of Management*, 17(3), 77-88. Retrieved from <https://search.proquest.com/docview/1963800521?accountid=147271>.
7. Rubio, E. (2018, 04). Building A truly "agile" human resources function: How to do it? *HR Strategy and Planning Excellence Essentials*, Retrieved from <https://search.proquest.com/docview/2043342601?accountid=147271>.
8. Torben Friehe(2017) bigger isn't better: smaller engineering teams are the key to innovation.<https://thenextweb.com/contributors/2017/12/09/bigger-isnt-better-smaller-engineering-teams-key-innovation/>.
9. Haines, T., Idemudia, E. C., & Raisinghani, M. S. (2017). The conceptual model for agile tools and techniques. *American Journal of Management*, 17(3), 77-88. Retrieved from <https://search.proquest.com/docview/1963800521?accountid=147271>.
10. 3 reasons why small teams make better tech innovations (2015) <https://www.fastcompany.com/3049791/3-reasons-why-small-teams-make-better-tech-innovators>.
11. Smaller teams are more productive than larger ones (2017) <http://smallbizclub.com/leadership/people-skills/smaller-teams-productive-larger-ones/>.
12. Why smaller teams are better than larger ones (2015), Jacob Morgan <https://www.forbes.com/sites/jacobmorgan/2015/04/15/why-smaller-teams-are-better-than-larger-ones/#3f2d64db1e68>.
13. Smart innovators value smaller teams over better processes (2011) <https://hbr.org/2011/12/quiet-but-unsutble-innovation.html>.
14. Steve Denning, How McKinsey embraces agile as a key to managing talent (2018) <https://www.forbes.com/sites/stevedenning/2018/04/24/how-mckinsey-embraces-agile-as-key-to-managing-talent/#4db12e75cb4c>.
15. John Sullivan, The 14 components of an agile talent management strategy (2012) <https://www.ere.net/the-14-components-of-an-agile-talent-management-strategy/>.
16. Emily Smykal, lean recruiting: 3 steps to an agile talent acquisition team. (2016) <https://www.jibe.com/ddr/lean-recruiting-3-steps-to-an-agile-talent-acquisition-team/>.

17. Redefining Organizational Boundaries: Building an Aware and Agile Organization by Enabling New Social Interactions- Benjamin Maupetit – May 2009; <https://dspace.mit.edu/bitstream/handle/1721.1/52754/501813710-MIT.pdf?sequence=2>
18. Capgemini Consulting - Agile Organizations: An approach to successful journey towards more agility in daily business – 2017
19. Performance Management: Playing a Winning Hand-2017 Global Human Capital Trends – Deloitte <https://www2.deloitte.com/insights/us/en/focus/human-capital-trends/2017/redesigning-performance-management.html>
20. Worldwide, 13% of employees are engaged at work- Gallup News <https://news.gallup.com/poll/165269/worldwide-employees-engaged-work.aspx>

Book references

1. Jay Galbraith, Diane Downey & Amy Kates, “Designing Dynamic Organizations”, Jaico 2008 Edition
Colin Price & Sharon Toye, “Accelerating Performance: How Organizations Can Mobilize, Execute and Transform, with Agility”, Wiley 2018 Edition

Movies as Pedagogy in Management Education: A Study

Mantha Raghu* and B. Naresh**

Abstract

Movies have more visual, virtual impact and facilitate easy comprehension of the management concepts. Hence there is rising popularity of using movies as a pedagogy in management education. Movies have greater impact when compared to the lecture based. It is blend of emotion, fiction and reality which will transform high impact on the viewer. It creates the scope and helps the students to think critically and help in learning the necessary managerial skills like leadership, strategy, marketing, Human Resources Management and financial management. Movies also help the students to grow and prosper in their life. Movies like *Swades*, *Rocket Sing*, *Lagaan*, *EkRuka Hua Faisla*, *Corporate*, *ChekDe* are extensively used in Indian context. This paper explores the relevance of such pedagogical tools for teaching effective management education with global impact.

Key words: Management Education, Pedagogy

Introduction

Management Education

The term 'Management Education' can be defined as teaching potential managers to manage operations of business entities which run for profit. The skill imparted by these organizations could be used by both government organisations as well as private organizations. The size and scale of these businesses determine the style of management. Hence a manager needs to be multi-skilled and aware of the different aspects of management functions.

At present scenario, the most trending option in career building among the students is Management Education. Even the parents are also more focused on their children to pursue management education. This is because of the changing dynamics in the world market and better Job opportunities comparing to the other sectors. The slowdown in the employment opportunities in IT sector management education is considered to be the most sought-after option for students and young professionals. There is a sudden increase in aspirants pursuing the management education, a large number of management colleges have flourished in the country. Every student wants to be graduated with an MBA or PGDM, irrespective of the educational background or interests.

The reason for choosing the management education is to: adopt knowledge through learning in different teaching modules and methodologies, develop analytical and decision-making skills, improve the communication skills, develop and enhance the leadership skills, develop entrepreneurial making more mature and responsible and inculcate management skills who can implement best practices and solve problems. Apart from all these the Management education teaches them, how to face the real world situations that very much need to survive in the corporate world.

In a simpler way, Management education provides essential skills to facilitate decision making by managers in real life situation in given economic and business environment. However, it teaches many possessions that will help an aspirant in his/her professional and personal life. Management education plays a pivotal role in facing the challenges of the economy. Management education began developing as a discipline in the past 100 years and has transformed along with the emerging trends.

Genesis of Management Education in India

However, management as a formal body of knowledge was introduced quite late in India when “The Indian Institute of Social Welfare and Business Management in started in 1954” at Calcutta in the State of West Bengal. The state government of progressive states then took the initiative and started universities in Andhra, Bombay, Delhi, and

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Madras in the same year. This led to the foundation of management education in India which in turn gave birth to the B-Schools. In the year 1960s India was the major center of management education. The first B-School was IIM, in Calcutta in November 1961. It started functioning with strategic academic support Sloan School of Management. The Government of Bengal provided free land. The business community also supported this venture. IIM, Ahmedabad followed suite a month after. It was a collaborative effort of Indian government and Harvard Business School (HBS). The intellectual support was provided by HBS while the government provided land and infrastructural support. Five years later Xavier Labour Relations Institute (XLRI) was formed. In 70's saw the management education gathering critical mass. IIM, Bangalore came into existence in the same decade.

The 1980s witnessed management education gaining wide respectability and hence there was demand for more institutes. This led to the formation of IIM, Lucknow in year 1984. Management education gained the importance of professional education.

In 1990's witnessed the technological revolution in India. Sectors such as hospitality, banks, KPO's and healthcare where there was a need for skilled knowledge workers grew at an exponential rate. This led to a wider acceptability of management education as a career option. To support the demand AICTE for the first time gave a go-ahead to a privatization of management education. Two more IIMs also came into being at Kozhikode and Indore.

Management education has in the 21st century become customized to suit the needs of the VUCA world which are governed primarily by a breath-taking speed of changes in India. The first decade of the 21st century also saw the started setting up of IIM's at Shillong in the year 2007. Within span of 10 years 13 New IIM's were established in Udaipur, Raipur, Ranchi, Tiruchirappalli, Kashipur, Rohtak, Nagpur, Vishakhapatnam, Bodh Gaya, Amritsar, Sambalpur, Srimur and Jammu.

Pedagogy

According to Collins English Dictionary Pedagogy is defined the principles, practice, or profession of teaching. Pedagogy is originated from the Greeks, to mean “child” and “lead”, then put them together to get an accurate meaning – “to lead the child”. According to Webster Dictionary it is defined as “the art or profession of teaching”.

The effectiveness of pedagogy often depends on the particular subject matter to be taught, on understanding the diverse needs of different learners, and on adapting to the on-the-ground conditions in the classroom and the surrounding context.

According to International Institute for Educational Planning of UNESCO, defined Pedagogy and its Forms: Pedagogy refers to the “interactions between teachers, students, and the learning environment and the learning tasks.” This broad term includes how teachers and students relate together as well as the instructional approaches implemented in the classroom. Pedagogical approaches are often placed on a spectrum from teacher-centred to learner-centred pedagogy; though these two approaches may seem contradictory, they can often complement each other in the realisation of educational goals—for example, a teacher-centred approach may be useful to introduce a new theme, while a learner-centred approach may be necessary to allow students to explore these ideas and develop a deeper understanding.

Types of Pedagogies

There are different types of teaching pedagogies. It depends upon the circumstances which can be adopted based on the topic and the subject. The following are the traditional pedagogies in place and followed by many of the academicians.

1. **Lecture Method:** This method is very commonly used. A lecture is an oral presentation of information by the teacher/professor.
2. **Discussion Method:** In this type of pedagogy discussion involves two-way communication between participants.

3. **The Demonstration Lesson:** In this type of pedagogy a planned lesson for a group of students by a teacher. It is most effective to observe a candidate teach a lesson to students and not to the members of the selection team. This is used to select the faculties to the respective Institutes.
4. **Buzz Groups:** In this type of pedagogy a small group is formed as a buzz group and an intense group discussion is done by responding to a specific problem or in search of very particular information.
5. **Brainstorming:** This type of pedagogy a group of people sit together and workout to create and generate new innovative Ideas and solutions. In this method people can think independently and suggest the best ideas whatever they that can be implemented.
6. **Role Plays:** In this method of pedagogy a role is given to each individual and allow them to play their role by giving certain characters to perform and create a collaborative story collectively. Participants have to perform their characters as per the prescribed scheme of rules and regulations.

Teaching Pedagogies in Management Education

In the Management Education there are different types of pedagogies adopted by the teachers. On parallel to the traditional pedagogues include lecture based discussion followed by simulation popular case study approach of Harvard followed by live projects, role plays and now currently popular Indian Movies as pedagogy. This for conceptual understanding and Managerial skill development. A variety of pedagogical approaches are common in management Schools/ Institutes, but some strategies are more effective and appropriate than others.

The idea of using film in business education dates back to the mid-20th century, when Ohio State University professor WJ. Fleig (1950) argued that “movies make it possible to bring to student's types of industrial activities which are foreign to their locality. The films may be presented during regular class hours and can be tied in with a class discussion. All or part of a film may be repeated if desired.”

Since the 1970s, educators experienced in using film as a teaching tool have urged its adoption by others. Wegner (1977) was a pioneer in using this medium. His 1977 pamphlet described various film types and how to use them in the classroom. Many others have reported successfully using films in teaching a broad range of disciplines or topics, such as political science, American studies, French, group dynamics, science, and anthropology.

Movies act as strong medium of communicating as it has unique qualities. It will help the student's community to learn the management theories and concepts and enhances the learning process. Movies tend to learn several examples of scenes from several block-buster and well-known movies. Films will help the students to attain the subject very close to the reality and helps the them to adopt the skills needed for their learning. The pedagogy of teaching with movies has some History.

As per the studies before 1980 instructors used to get films from audio video centers, video parlors, education film sources and private institutes/organizations. But thing have changed drastically with the technology in place. There vide range of service providers like Netflix, Amazon, Alexa and many others providing the films. Film scenes impacts as it offers visual portrayal of abstract theories and concepts tough in management courses. Showing the movies which has different concepts in different situation will improve the skills of the students very much. Films act as powerful tool for the teachers to explain the concepts to the students. According to Film theorist Siegfried Kracauer (1973) said that a “unique property of film is its ability to “make one see and grasp things which only the cinema is privileged to communicate”.

Using movies as a classroom teaching tool has a number of advantages for business educators. First popular movies are useful in illustrating concepts such as ethics, product placement, team leadership and human resource management. Second the use of film in the classroom is legal in the United States. Under terms set forth in the 1976 Copyright Act, as long as films are shown in class for teaching purposes at not-for-profit educational institutions, instructors and professors have access to a wealth of material to supplement their texts, lectures, class discussions and in-class presentations.

In majority of the Case Analysis Film is used a tool. It has story solid plot that will help for a case analysis. Good selection of movies will help the students to develop the student's analytical skills.

Objectives

1. The paper explores advantages and disadvantages of Indian based movies as pedagogy for management education.
2. Paper also explores several variations of this pedagogy for course design and exam in management education.

Methodology

The following are five Indian movies selected for this study to discuss their utility for various courses in management.

1. Rocket Sing (Sales Management, Entrepreneurship)
2. Chak de (Teamwork, Leadership and Strategy)
3. Lagaan (Teamwork, Leadership and Strategy)
4. Corporate (Strategy)
5. Swadesh (General Management) and theory of constraints

S.No.	Name of the Movie	Theme	Plot
1	Rocket Singh (2009) IMDb: 7.5/10	Sales Management, Entrepreneurship	A story of a fresh graduate trying to fix a balance between the maddening demands of the professional way and the way of his heart.
2	Chak de! India (2007) IMDb: 8.2/10	Teamwork, Leadership and Strategy	It is the Dream of the coach of Indian Women's National Hockey team to make his girls team emerge victorious against all odds.
3	Lagaan: Once upon a Time in India (2001) IMDb: 8.1/10	Teamwork, Leadership and Strategy	The people of small village in India Stake their future on a game of cricket against their ruthless British Rulers.
4	Corporate (2006) IMDb: 6.5/10	Strategy	Two Corporate giants compete in order to recklessly maximize their respective profits.
5	Swadesh (2004) IMDb: 8.3/10	General Management	A successful Indian Scientist returns to his village to take his nanny to America with him and in the process, he rediscovers his roots.

Rocket Singh

In this movie the Sales Management concept is shown in a very positive way. The way a sales person makes his life teaches us that money is not the only way to convince people. It is only one of the several variables for motivation. Infact, you must persuade, negotiate and engage with the people around to be a good sales person. You have to break the Ice, start having conversations and ask for help and guidance and engage people in discussions and then cultivate people skills. Another management concept which we learned from this movie is about Customer Satisfaction. A customer satisfies only when he has received the right product and right customer service. Hence, Delighted and satisfied customers are your ambassadors and their referral can generate more business than you can handle.

Chak de! India

Leadership Style: In the beginning of the movie, Kabir khan has been let down after losing Men's National Hockey cup. People started accusing him for the defeat. How Kabir khan turns his negatives into positives is the whole plot of the movie. He didn't let his hopes down and carried the emotion of winning World cup and made it possible with the Indian Women's Hockey team. Initially he was opposed by many while conveying his vision to the team members but he is sure of what he is doing. The management learnings from this movie is to identify our competencies and utilising in the best way. In a match against Russia, Kabir khan motivates BindiaNayer to come and play. Leadership qualities, Collaboration and team building are the few management concepts which are well depicted in the Movie. The movie also depicts how leader has to convey aggression and motivate, passion and intelligence. Further the movies show the qualities of the leader by showing attitude and upright in what he going to do. He should try integrate the whole team and develop faith in the team.

Lagaan: Once upon a Time in India

It's a Bollywood epic sports drama, Bhuvan who is a rebel raising his voice against unfair taxation levied by British. There are many Management learnings from this movie. It is known fact that a battle is never won alone, a team play makes the battle win and it is executed very nicely in the movie. Successful leaders are those who hold the team he is the one who instil in his team when shoulders start to droop, and spirits threaten to flag. Despite many negatives Bhuvan showcased exceptional Leadership skills to form a team and thrive it to win against the British Cricket team. A true leader should always be unbiased to his/her team members. Past glory/ track record is good to consider but always prioritize the skill required to get the job done. Promoting diversity and accepting the team is the main essence of this movie. The movie also shows the how to build a diverse team with members from different ethnic, religious, work and even age background.

Corporate

The Movie exposes facts and figures of the corporates which happen in their boardrooms and how corruption has become intrinsic part of the business culture in the times of cut throat competition. The learning from this movie is how ethics is important at work place. Which way you want to be and lead your organization, Ethical way or Unethical way? We always know what is right and what is wrong but to taste success we forget our values and follow unethical practises.

Swadesh

It is a film that tackles the issue that development throws up on grass root levels. It is the movie about how Mohan Bhargava, an ordinary person transforms himself extra ordinarily against all odds to bring change in the society. The best management lesson learnt from this movie is all about Me to We concept. Individually we are one, we are alone, less skilled but together we are many, togetherness is strength and at the end it is the team work which lighted the bulb. The other thing this movie emphasized was on Social Entrepreneurship. It is the use of start-up companies and other entrepreneurs to develop, fund and implement solutions to social, cultural or environmental issues.

Conclusion

We conclude that Indian movies provide rich and insightful management lessons for students Business Executives. The movies also serve as very conceptual pedagogy for experimental learning. Movie based credit course can be designed which may be appealing to students while providing immense learning experience.

Alternately Group discussion/ panel discussion with directors and Actors can be held retrospect. The evaluation of movie based credit course can be qualitative and Quantitative research methods.

References

1. Chowdhury, Subir. (1999). Management Education in India: IMT Monographs MOI-8, pp. 9-21.
2. Dharani, P. Sinha. (2004). Management Education in India - Perspectives and Challenges, ICFAI Press, Hyderabad, pp. 22-28.
3. Kaifi, A., and Belal, A. (2010). The State of B-Schools: Educational and Moral Imperatives for Market Leadership, *Journal of Business Studies Quarterly*, Vol.1, No.4, pp. 55-56.
4. Sweta., and Manoj, Kumar. (2011). Management Education in India: Issues & Challenges, *Journal of Management and Public Policy*, Vol. 3, No. 1, pp. 5-14.
5. Anne, Macy *et.al.* (2008). Using Movie as a Vehicle for Critical thinking in Economics and Business, *Journal of Economic Education Research*, Vol 9 (1), 31-51
6. Mathews, S. Charles. *et.al.*, (2012) Understanding the Use of Feature Films to maximize Student Learning, *American Journal of Business Education*, Vol 5 (5), 563-574.
7. Roth, Lawrence, Roth. (2001). Introducing Students to “THE BIG PICTURE”, *Journal of Management Education*, 25(1), 21.
8. Champoux E. Joseph (1999). Film as a Teaching Resource, *Journal of Management Inquiry*. Vol. 8 (2), 206-217.
9. Aravopoulou, Eleni. (2017). Modernizing the curriculum and pedagogy-to be or not to be? Using film and online video to engage students and enhance learning. *International Journal of Higher Education Management*, Vol. 4(1), 1-18.
10. Parker D Richard (2009). Watch this Clip: Using Film as an Augmentation to Lecture and class Discussion, *Academy of Educational Leadership Journal*, Vol. 13 (4), 129-134.

Leveraging Untapped Ceremonial Days for Promotions in India

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Introduction

Historically occasion-based marketing for brands has not been new in Indian context as several brands like Cadbury, Bajaj, Big Bazaar, Mahindra have used some of the prominent days such as (Valentine's day, Independence Day, Children's day, Festivals, Mother's Day and Father's Day) for promotions in India. Independence Day is a great occasion for brands to connect with Indians. Many popular brands are using activations to build popularity and give the consumer an experience that will make them feel a real personal connection to the company.

Sandell (1968) was the first to investigate how an occasion affects a consumer's purchasing and choice behavior with similar findings following by Green and Rao (1972). Belk (1973) examined the frequency of all gift-giving occasions in the US. He found that the most popular occasion is birthday (35 %). This is followed by Christmas (29 %). The other occasions listed in his study are wedding, Mother's Day, Father's Day, wedding anniversary, and graduation.

Bussey (1967), in a study in the U.K., found that the most popular occasion is Christmas, followed by birthday. Lowes, Turner and Wills (1971) cite a series of British Gallup Polls conducted from 1963 to 1967. The polls found that over 90 % of the adult population gives gifts during Christmas every year. Bussey (1967), in the British study, found that over 90 % of the respondents gave wedding and birthday gifts in 1966.

Bruwer, Fong, and Saliba, (2013) conducted exploratory study aimed to examine the relationship between perceived risk, Risk-Reduction strategies (RRS), and the occasion-based purchase of wine, a product widely regarded as representing a complex buying situation for consumers in a retail setting.

Several brands in India have recently used the India's 69th Independence Day on August 15th 2018 and the nature of the promotions is given below in Table 1:

Table 1: Brands which used India's 69th Independence Day for Promotions

Brand	Advertising	Rationale
1. Manyavar #Veshbhusa campaign	Men's ethnic wear brand Manyavar extended its popular #Veshbhusa campaign this year as well. The campaign encourages Indians to wear Indian traditional clothing. Manyavar maximised reach of the campaign throwing 'The Veshbhusa Challenge' through its brand ambassador Virat Kohli.	Consumers involvement and engagement with the Independent day. Fit with product category.
2. Bajaj Avenger	Steering clear of conventional ways of invoking patriotism on 15th August, Bajaj Avenger touches a relevant issue of plastic use in the country. The campaign neatly crafts a beautiful message through the digital film.	Being responsible for the society /environment is way of celebrating Independence Day rather than paying lip service.

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1. Red FM's National JockExchange	In an attempt to bridge growing distances across Indian communities, RedFM has launched #CrossTheBorder campaign. Radio Jockeys from different cities will switch their locations and discover different flavours across state borders of India. The campaign's is being amplified through numerous Live videos and cross posts on social media handles of the RJ's.	To explore cultural nuances of the regions
2. Mahindra's Feel the Nation	Showcasing spirit of " <i>Anekta Main Ekta</i> ", Mahindra Trucks and Buses launched #FeeltheNation campaign. The campaign talks about vast reach and diverse culture of Mahindra's network.	To communicate diversity
3. Greenply's Asli Azadi	Greenply launched a digital film to pay tribute to the bread earners of India. The campaign celebrates freedom of every farmer from bonds of economic burden, debts and therefore creating a sustainable society for everyone.	Planting trees as CSR activity. (indirect linkage with the product as farmers carry stool and stand on it)
4. BookMyShow's Gold Tickets on BookMyShow	Inviting users to book tickets to Akshay Kumar starrer GOLD, BookMyShow calls out Indians to cheer together in cinema halls for India's first ever Olympic gold medal.	Fits with product usage and occasion of celebrating India's first Olympic gold medal.
5. Vivo's Happy Independence Night	Advocating female security, VIVO launched a digital film for Independence Day. The campaign communicates the fact that a country will be free only when the female population feels secure regardless of what time of day it is.	Taking lead from the Mahatma Gandhi statement that real freedom is when Woman walks freely in the night.
6. ParleG's #YouAreMyParleG	Parle G paid a tribute to Indian soldiers on Independence Day through their digital film. Pitching ParleG ' <i>Bharat Ka Apna Biscuit</i> ', the brand narrates a true story of an Indian soldier	Fit with the product usage and customer engagement
7. Lava's #ProudlyIndian	To celebrate the spirit of Indianness and love for the country, Lava invited users to sing their favourite patriotic song and upload it with #ProudlyIndian hashtag.	Fit with the product usage and customer engagement
8. Gems' #GemsOfIndia	Gems launched an Independence Day special pack as part of the celebrations. The pack has tricolored gems. The campaign is	New product developed for the occasion.

A common trend spotted this year was a shift towards rural audience set. Many brands steered clear of cliched ways of wishing their audiences Independence day and instead chose to build a purpose well connected to their brands.

Gap and Need for the Study

However, some of the notable observable days such as world bicycle day, world rivers day, Worlds senior citizen day, National youth day, Coconut day, Thrift day, Laughter's day, national consumers days which are observed and celebrated at national and international level are relatively not fully utilized for promotions by the Indian Marketers. There is need to go beyond traditional holidays for promotions and for powerful customer engagement tools. Many popular brands are using activations to build popularity and give the consumer an experience that will make them feel a real personal connection to the company. Hence the need to suggest brand activation and advertisements for these ceremonial days.

The paper attempts to fill this void by exploring the tapping of the ceremonial days as marketing opportunities for promotions by suggesting new advertisements and sales promotions.

Objectives of the Study

1. To explore the opportunities for brand promotions (advertisements & sales promotions using on - ground brand activations/digital) for various observable days.
2. To understand the importance of the ceremonial days in national and international/global context.

Methodology

The study is based on secondary data and conceptual in nature. Eight Ceremonial days were selected for the study and the global perspective is being discussed.

Significance and the global perspective for the ceremonial days.

1. World Bicycle Day

United Nations General Assembly declared June 3, as World Bicycle Day, acknowledging the “uniqueness, longevity, and versatility” of the bicycle. For a long time now, the bicycle has been recognised as a sustainable mode of transportation that is simple, affordable, reliable, clean, and enhances urban mobility and access. There are more than a billion bicycles in the world, twice as many as automobiles. In recent years bike production had climbed to over 100 million per year (compared to 50 million cars).

Copenhagenize Bicycle Friendly Cities Index 2017, have ranked 136 global cities and identified the top Copenhagen, Denmark, Utrecht, The Netherlands, Amsterdam, Netherlands, Strasbourg, France, Malmö, Sweden, Bordeaux, France, Antwerp, Belgium, Ljubljana, Slovenia, Tokyo, Japan, Berlin, Germany.

There is need to put India among top ten with concerted efforts although it may take years of hard work. Various types of ‘nudges’ like awareness, education, and training will be implemented to affect behavioural change towards increasing cycling. Alongside, the program will focus on working with industry and government to bring in supply-side measures that can influence scale.

2. World Rivers Day

World Rivers Day takes place annually on the last Sunday of September, with the next celebration to be held on Sunday September 24, 2017. The world's demand for water is likely to surge in the next few decades. Rapidly growing populations will drive increased consumption by people, farms and companies. More people will move to cities, further straining supplies. An emerging middle class could clamour for more water-intensive food production and electricity generation. India is one of the most water-challenged countries in the world.

Overall, one out of every four cities in the world was found to be water stressed. The data gathered for this analysis was published in the journal Global Environmental Change. Delhi is figured among the world water

stressed countries of the world source: The Nature Conservancy, says that India's capital city is world's second most water-stressed city, just behind Tokyo. The study was carried out after surveying the water infrastructure of world's 500 cities with population of more than 750,000 (called large cities in the study). Its results have been published in *Journal Global Environmental Change*.

3. Worlds Senior Citizen Day Celebrated on 21st August of Every Year

World Share of the population over 60 from 8% India ageing report to 19% by 2050. (India ageing report 2017 by UNFPA).

While the trend of ageing societies is a cause for celebration, it also presents huge challenges as it requires completely new approaches to health care, retirement, living arrangements and intergenerational relations. The population of people over 60 years of age will reach 1 billion within the decade 0.80 % of world's older people will live in developing countries by 2050. The over 60 population will be larger than the under 15 population in 2050. Source: The United Nations Population Fund (UNFPA) and Help Age International have released a fact-finding report on aging, Ageing in the 21st Century, People everywhere must age with dignity and security.

4. Coconut Day

Every year 2nd September is celebrated as World Coconut Day to commemorate the formation day of Asian Pacific Coconut Community (APCC).

India is one of the top coconut consuming countries in the world. 1. Indonesia (17567K Tonnes), 2. Philippines (14138K Tonnes), 3. India (11708K Tonnes), 4. Brazil (2901K Tonnes), 5. Sri Lanka (2548K Tonnes)

In the past decade, the global demand for coconut had grown by 500%. During the same time, coconut got its biggest marketing boost yet. With a series of celebrity endorsements, it has been re-launched as a “superfood” to the global market.

5. World Thrift Day

World Thrift Day is celebrated every year on 31st October worldwide to promote savings and financial security of individual and nation as a whole. In India due to death of late Prime Minister Indira Gandhi on the same day in 1984 this day is being celebrated on 30th October. World thrift day was established to inform people all around the world about the idea of saving their money in a bank rather than keeping it under their mattress or at home.

Health is Wealth, but in today's world wealth is essential to safeguard your health. Little drops make an ocean. Small saving gives wheels to nation economy. “High household saving ratios are also an indication of financial repression, where the government channels household savings towards itself, while offering back a low real return.

The ratio of India's gross domestic savings in 2014 according to World Bank data is 31.1%. What this number means is that if the GDP is Rs100, then the total savings of the country are Rs31.10. A high savings ratio, especially when this is due to household savings, usually points to lack of government run social security, which then encourages citizens to save for the future.

6. World Laughter Day

The celebration of World Laughter Day (6th May) is a positive manifestation for world peace and is intended to build up a global consciousness of brotherhood and friendship through laughter. It is most often celebrated by gatherings of people in public places with the sole purpose of laughing. Laughter is the best medicine! Life comes only once, to make it worth you need to laugh every day. Laughter strengthens your immune system, boosts mood, diminishes pain, and protects you from the damaging effects of stress. By seeking out more opportunities for humor and laughter, though, you can improve your emotional health, strengthen your relationships, find greater happiness—and even add years to your life.

7. National Consumer Rights Day

In India, 24th December is observed as National Consumer Day. National Consumer Rights Day is observed every year in India on December 24, since the Consumer Protection Act, 1986 has been enacted on the same day in 1986. The Word Consumer Right Day was first observed during March 15, 1983 and since then it has become a very important day in terms of gathering citizens and insisting them to lend their voice towards their rights.

8. National Youth Day

Swami Vivekananda's birth anniversary, also called Swami Vivekananda Jayanti, is celebrated on January 12. The day is also observed as National Youth Day. The philosophy of Swamiji and the ideals for which he lived and worked could be a great source of inspiration for the Indian youth. Swami Vivekananda's thought-provoking lectures, quotes and writings, have been a subject of study and a great source of motivation for the youth.

The world's population is young: 42 % of people are under the age of 25. In South Asia and Sub-Saharan Africa, the number of people aged 12-24 has steadily risen to 525 million in 2015-almost half the global youth population.

Advertisements and sales promotions suggested based on the ceremonial days were given Table 2.

Table 2: Brands, Advertisement Sales Promotions Suggested for the Ceremonial days

S. No	Ceremonial days	Brands suggested	Advertisements for advocacy	Sales promotion or on-ground activation
1	WorldSenior Citizens Day	Health genie, Lenskart, Life insurance and banks and pharma companies, and youthful brands, Coffee and Tea brands etc	"We care for you today and everyday"	#aliftothelifter
2	Coconut day	Swiggy, Parachute and Fevicol, MTR foods, Kerala Tourism	"Common taste of India"	#thecoconutcontest #keraswagadam
3	World Rivers day	Coco-cola ,Bisleri	"World is better with Coke"	#viewthereverse@lenskart
4	World Thrift day	Axis bank/SBI/ Mutual brands,	"you be your surety". "Save to safeguard yourself"	#thriftdaysaleison #getyourthriftdaydiscount
5	National Consumers day	Amazon, LIC and Samsung, Nokia, LG, Sony, Maruti	"A special gift"	#myfreerideinUber
6	WorldBicycle day	Zoom car	"Fit and Time at a time"	#wheelingtowardsthechange
7	World Laughter day	McDonald's, Fevicol, Imperial Blue	"This Laughter day, taste the real happiness"	#laughometer #Spreadthehappiness
8	National Youth day	Nike , Duke T-shirts, Levis , Fastrack(youthful brands)	"Unleash the power of youth"	# lets us raise the wall # lets go probono

(Source: Prepared by the Authors)

Advertisements and Sales Promotions for Ceremonials Days

1. World Senior Citizens Day

Advertisement: “we care for you today and everyday”

Any online store like health genie or old is gold can promote their products on this day with a social message of letting people know everyone can care for elderly and the kind deed in fact stays along with them even after the day is gone.

This ad portrays the subtle emotions of an old age lady who is unable to walk without support was seen by a young man and gifts her a walking stick. Later the ad reveals that he is not her own son and the scenario is in an old age home. This ad conveys to the viewer that the action of gifting a walking stick to the old lady will support her daily and the kind gesture will forever stay in her mind.

Sales Promotion: #alifftothelifter

This is a promotion campaign that can be used by Maruti Suzuki promoting that “Good cars lead to good Deeds” with an idea of giving a lift to senior citizens of the society. This will be an initiative that can make people think and acknowledge what their grandparents and parents did for them and to which makes them understand their responsibility of caring them in return.

2. World Coconut Day

Advertisement: “Common taste of India”

Coconut is mainly consumed by North and South Indians, but most of the Indians aren't aware of coconut day. So, this is a great opportunity for some food delivery companies like Swiggy and Zomato to build a customised menu on Coconut day for all the coconut lovers across India. The ad mainly focuses on the menu, specials deals and offers by Swiggy or Zomato. It mainly focuses on Online advertisements.

The menu contains Coconut dishes like coconut dishes like Coconut rice, Coconut milk pulao, Coconut Oats upma, Coconut Curry, Coconut rasam, Coconut chutney, Coconut mint chutney, Coconut mango chutney, Coconut Burfi, Coconut laddu, Coconut chocolates, Coconut chocolate cake, Coconut cookies, Tender Coconut fig smoothie etc. This will be targeted to the food lovers and Coconut lovers.

Sales Promotion 1: #thecoconutcontest

Apart from companies which are related to coconut, other companies also can use this day by organizing a fun activity or challenges using coconut for their employees or customers and can gift a small thing on this occasion. For example, a toy company like Hot wheels, Hasbro as are retailers of small toys can conduct games for orphan children with coconuts and gift golden coconuts which consists of surprise gifts and toys stored in the coconut. They can also tie up with any school and conduct contests on the same occasion and educate the importance of coconut and the benefits of it.

Sales Promotion 2: #kerasvagadham

Coconuts are predominantly used by South Indians. Within the South Indians, Kerala is the place where coconuts are majorly consumed and grown. Kerala is very much known for the Tourism. More than 50% of state's revenue is generated by tourism. Hence, the campaign is about welcoming the tourists with a coconut and greeting them 'Happy coconut day'. This gives a special experience to the tourists and shows their authenticity.

3. World Rivers Day

Advertisement: “World is better with Coke”

Companies like Coco cola who are already tied up with The rivers trust and World-Wide Fund (WWF) from 2007 are working together to help conserve the world's freshwater resources. Expanding this focus and building the progress,

they have renewed their collaboration through 2020 to achieve even greater impact by helping address the natural resource challenges that impact fresh water.

Coca cola believe in working together and deeply engage the Company's value chain by involving additional partners to achieve greater scale and impact; and spark commitments from businesses, governments, and consumers to take action to value, conserve and protect the planet's natural resources. But not many know about their initiatives and they can create an ad named "World is better with Coke" showcasing that each drink they consume is contributing to the initiative of "cleaning the rivers" and also promoting the importance of respecting nature by being socially responsible and using dustbins to dump their trash. With this ad they are also projecting their company as an Eco-Friendly brand in the mind space of the audience.

Sales Promotion: #viewthereverse@lenskart

This day can also be used by marketers of companies like Lenskart as they do things which others doesn't and do it differently. This campaign is all about to create a beautiful memory for orphan children by taking them to a trip in a sail boat and providing a delightful experience that they can cherish on the Rivers day. It is a different thought and initiative providing a different experience to the children.

They can also conduct an exhibition with the water bottles and disposable products creatively.

4. World Thrift Day:

India has been traditionally a nation of savers. Indians managed to spend less than their income and save the maximum possible amount out of regular income securing for future. This has also meant postponement of current consumption for a better future. The Indian middle class may not enjoy a great standard of living, but the savings culture ensures that they need not slog at the age of 70 and 80. Indians are stick to a culture-save today; invest regularly and wisely and ensure a safe and comfortable future.

Advertisement 1: "you be your surety"

The ad speaks about the initiative taken up by schools to make children understand the importance of inculcating the habit of savings from childhood. Can donate piggy banks to the school students and tell the importance of savings and ask them to start saving small amount of money.

Advertisement 2: "Save to safeguard yourself"

Kotak 8111 savings account with 6% interest rate, no physical bank interaction, 0 bank balance, targeting to students and freshers.

Sales Promotion: #thriftdaysaleison #getyourthriftdaydiscount

As Thrift day is celebrated on the 30th October every year where the Ashadam, Diwali sales end. The remaining stocks can be cleared with a clearance sale on the thrift's day by promoting "Save up to 70% on this Thrift's day". Companies like Spar, Damro can follow this promotion campaign.

5. National Consumers Day

Significance: This day provides an opportunity for individuals to highlight the importance of the consumer movement and the need to make every consumer more aware of their rights and responsibilities.

Advertisement: "A special gift"

This ad starts with a doorbell ring and door opens to a warm smile of a delivery boy handing over a package to the owner and wishing them a happy consumers day. The owner of the product looks the card saying, "Thank you, it's your day!" and finds his rights and how Amazon is righteously providing services that are meeting the consumer rights.

Sales Promotion: #myfreerideinUber

Uber with the help of the booking history of its customers tracks and gives a free ride (ex: way back home) even without booking to few selected regular customers and wishes them a happy consumer day. They also ask them to share their experience with Uber through a video or a post on their social media with a “#myfreerideinUber”

6. World Bicycle day

Significance: Bicyclists in India are mainly 'captive users', they use bicycle because of affordability issues. In India the economically weaker section of society typically locates very close to work opportunities, whether by legal or illegal means. Certain occupations were found to be dependent on cycles for mobility. 79% of the sample was found to be active cyclists.

Advertisement: “Fit & Time at a time”

As time and health are most important constraints in one's life, Zoom car came up with a Cycle Rental service and tied up with Metro stations making available of their bicycles so that people can easily and quickly travel to their destinations once they get down from a metro.

This ad starts with people getting down from a metro station and starts booking their rides, where in a guy will unlock a Zoom car cycle and starts to his workplace. On his way, he noticed that people got stuck in traffic. Eventually he smiles at them, riding his bicycle and the ad ends when he is moving in traffic with a message of Happy Bicycle day.

Sales Promotion: #wheelingtowardsthechange

Murugappa group is one of the India's Business conglomerate having 28 businesses including 9 listed companies. Over the decades, the Foundation has been extensively engaged in eco-conservation, public health, welfare and education initiatives in the communities of its operational presence. It also owns bicycle brands such as BSA, Hercules etc.

So, the Murugappa group can promote a bicycle rally donating food items and clothes for the needy people.

7. World Laughter's Day

Significance: Laughter, Humor and joy are important part of life. People in India believe it increases the circulation of antibodies in the blood stream and makes us more resistant to infection, lowers blood pressure, reduces stress hormones and increases muscle flexion.

Advertisement: “This Laughter day, taste the real happiness”

On this special day shopkeepers plans to make their customers smile. So, they hire a person to mask himself as a clown and make the customers smile all day. After a tiring evening the clown settles down on a bench where the real clown is placed. Later, a small kid walks out of the MCD store cheerfully with an ice-cream in his hand along with his father. Then he looks at the tired clown who made him smile earlier. The kid understands that the clown was dull and hungry. Then, the kid offers his ice-cream to the lost clown and makes him smile.

This portrays the taste of real happiness.

Sales Promotion 1: (Event – Employee Branding) #laughometer

Employees working in the corporates have high level of stress which ultimately affects their health. To avoid this stress, companies can take an initiative on this special day by hosting an event. Where in employees can come up with a stand-up comedy show or can share their funny movements or can do anything to make their colleagues laugh. Which acts like a stress buster to the employees. The person who entertained and made the employees laugh most will be given a gift.

Sales Promotion 2: #Spreadthehappiness

FM Channel being a reachable mode of communication to various people can take part of promoting the laughter's day by playing different comedy scenes, Speech by the stand-up comedians, Sharing the funny movements from different people and making their audience understand the importance of laugh in one's life.

8. National Youth Day

Advertisement: "Unleash the power of youth

Show the achievements by youth done at local, national and international in all endeavors (academic, science, sports, cultural etc) and celebrate their success.

#lets raise the wall

Youth pledge for against consumption of indulging in smoking, drinking and drugs and drunken and speed driving.

Sales Promotion: # lets go probono

Invite probono volunteers from youth which can besponsored and rewarded by youthful brands, youth will work in the areas of schools both urban and rural and NGO's etc.

Conclusion

Several ceremonial days offer exciting customer engagement platforms and have some serious implications for the marketers and policy makers. These promotions also have serious bearing on brand personality and forging image as responsible brands thereby increasing consumers emotional relationship with brand. Investment in bicycle infrastructure is a modern and intelligent move. Plenty of research shows the social, economic, environmental, and health benefits of urban cycling. The ceremonial days also call for customer engagement driven events or activities for protection of the rivers and environment, being responsible for senior citizens sensitizing thrifty or savings culture, etc. The study is conceptual in nature can be further tested with quantitative studies or qualitative research using focus group discussions with stakeholders.

References:

1. Belk, R.W. (1973). Application and analysis of the behavioural differential inventory for assessing situational effects in consumer behaviour. In Ward S. and Wright. K. (eds.), *Advances in Consumer Research.*, 370-380, Ann Arbor, Michigan: Association for Consumer Research.
2. Bussey, J. (1967). Patterns of Gift Giving, Bradford, England: Management Centre University of Bradford.
3. Lowes, B., Turner, J. and Wills, G . (1971). Patterns of gift-giving. In Wills, G . (ed.), *Explorations in Marketing Thought*, 82-102, London: Bradford University Press.
4. Sandell, R.G. (1968), "Effects of attitudinal and situational factors on reported choice behavior", *Journal of Marketing Research*, Vol. 5 (4), 405-408.
5. Green, P.E., and Rao, V.R. (1972), "Configuration synthesis in multidimensional scaling", *Journal of Marketing Research*, Vol. 9(1), 65-68.
6. Bruwer, J., Fong, M., &Saliba, A. (2013). Perceived risk, risk-reduction strategies (RRS) and consumption occasions. *Asia Pacific Journal of Marketing and Logistics*, 25(3), 369-390.
7. <http://www.adageindia.in/advertising/here-is-how-brands-are-celebrating-independence-day-2018/articleshow/65402790.cms>
8. <https://thebftonline.com/2018/headlines/we-are-missing-out-on-us4billion-coconut-industry/>

9. <https://www.consumersinternational.org/what-we-do/world-consumer-rights-day/2018-making-digital-marketplaces-fairer/>
10. <https://www.unfpa.org/press/population-over-60-year-olds-reach-one-billion-within-decade>
11. <https://www.downtoearth.org.in/news/delhi-ranked-second-among-worlds-most-waterstressed-cities-45456>
12. <https://www.livemint.com/Money/6m2f6oZin4bxBcsISv14TI/311ratio-of-Indias-gross-domestic-savings-in-2014.html>
13. <http://copenhagenizeindex.eu/>
14. <https://news.psu.edu/story/154026/2011/10/28/health-care-professionals-learn-stress-reduction-through-laughter>
15. <https://www.internationalrivers.org/dayofactionforrivers2018>
16. <https://news.nationalgeographic.com/2018/03/rally-for-rivers-un-world-water-day-spd/>
17. <https://www.ndtv.com/india-news/heres-why-national-youth-day-is-celebrated-on-swami-vivekananda-jayanti-1799237>
18. <http://blogs.worldbank.org/opendata/chart-how-worlds-youth-population-changing>
19. <http://www.indianmirror.com/homepage-articles/World-Thrift-Day.html>
20. <https://www.brandingstrategyinsider.com/2013/12/building-brands-with-occasion-based-marketing.html#.XBC9TvZuLIU>

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