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AN ANALYTICAL OVERVIEW OF E-COMMERCE IN INDIA

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ABSTRACT

India is growing rapidly in terms of business and industrial development through online business channels. In this growing environment, it is of paramount importance for different online firms to understand the e-commerce. The present research is an attempt to analytically overview the current status of e-commerce industry of India. The research also includes the explanation of advantages and challenges associated with e-commerce in India. The study also overview future of this emerging sector in India and offered valuable suggestions to formulate suitable strategies to promote and develop e-commerce market in India. The study majorly based on secondary data sources consulted from previous studies, books, magazines, reports, articles and discussion with its different stakeholders. The study came to notice that the speed of growth of e-commerce in India is satisfactory but not at par with global e-commerce industry. The study observed certain advantages like less cost, all time availability and many more as experienced by e-commerce businesses. But it still faces same problems like poor telecom infrastructure, no strict legal bans, and lack of good attitude towards technologies and poor academic syllabus regarding e-commerce. The article suggests remedial measures for effective implementation of e-commerce development in the country. Current study also provides implication for online business firms to formulate appropriate strategies to boost e-commerce market in India.

KEYWORDS

e-commerce, e-business, m-commerce, online business.

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INTRODUCTION

The term 'e-shopping' described as online shopping is the conduct of business via the internet which relates to activities of information searching, information sharing, purchasing or exchanging products and services; also maintaining customer relationships without face to face meetings unlike transaction done traditionally (Kenney, 1999).

Customers purchasing through e-commerce channel are always seeking new products, new attractiveness, and the most important thing being price compatibility with their budget. The internet is the best way to save time and money by purchasing online within their range of budget at home or anywhere. Online consumers don't have limits to online shopping. They also use the internet for comparison of prices of goods and services, news, visit social networks, and search for information, and so on (Rodriguez, 2009).

Online shopping can be described in different ways by scholars, Kuester (2012) described various forms of online shopping include Business-to-Business (B2B), Business-to-Consumer (B2C) and Consumer-to-Consumer (C2C) models. Hence, with the evolution of technology and an increase in consumerism all over India, e-commerce is riding the high tide in online business. Today, increasing internet and mobile penetration, growing acceptability of online payments, and has provided the e-commerce sector in India the unique opportunity to companies connect with their customers, it said. In India, roughly 60-65 percent of the total e-commerce sales are being generated in recent years and also likely to continue upwards. With the advent of e-commerce technology in India, Online shopping has become a most-liked trend and major are Flipkart.com, Myntra.com, Amazon, Paytm mall, snap deal, Shopclues.com, Nykaa.com., Naptol.com, Tradus, Jabong, Yebhi, etc.

E-COMMERCE SECTOR IN INDIA

Doubling the online sales in the last five years, the e-commerce sector in India has started to take shape and is expected to continue the phenomenal growth. Many factors are coherently supporting the growth of E-commerce in the world, and especially in India. Moreover, the speed of the growth in E-commerce in India is remarkable. Factors such as increased smartphones usage, convenient and economic internet access, and busy schedules of working professionals etc., have led to the growth of E-commerce. China is the biggest e-commerce market in the world, followed by the USA, and then India, but as far as the growth rate of this sector is concerned, India holds the first rank.

The primary driving force to attract and retain customers is quality of the product and service. It is important to understand that customer will only return if the business is able to create an impression of a responsible brand, which is considerate, and gives required importance to the customer.

One can say that customers remember a business if the business remembers its customers! Also, brand familiarity and recognition is important here, like in any other industry. The e-commerce company should be connected to their customers well and understand their traits. This will help them surprise their customers through customized offerings or worthy offers. Also, choosing the right e-commerce platform to run online stores plays a vital role in customer experience.

RATIONALE AND OBJECTIVES OF THE STUDY

Due to the rapid development of information technology in the state, the Government has formulated a scheme for e-commerce for online trading and brand building of the products and services. The digital commerce would provide a cost-effective impetus for growth, opening a window to new markets, increasing spread by shortening traditional supply chains, containing systemic inefficiencies, reducing costs, thereby leading to higher revenues and profit margins for online business firms. Thus, entry and expansion of e-shopping business firms portrayed that there are so many providers, the most important thing for organizations is to understand consumer wants and needs in this competitive business environment (Hasslinger, 2007). Hence, it is very important to know about e-commerce phenomena. In this framework, the present study has been made to provide an overview of e-commerce in India. The present study confined to answer the following questions:

- To understand the term E-commerce and current trends in India.
- To identify major advantages and challenges associated with e-commerce in India.
- To offer valuable suggestions to boost e-commerce in the country.

RESEARCH METHODOLOGY

The process used to collect information & data for the purpose of making business decisions. The methodology may include publication research, interview, surveys and other research techniques & could include both present & historical information. The researcher has used only secondary data that has been collected from various articles, journals, books, websites etc. This has been used to study the conceptual framework, definition, present trends and some of the challenges and opportunities of e-commerce in India. All the data included is the secondary base and proper references have been given wherever necessary.

CURRENT SCENARIO AND EMERGING TRENDS IN E-COMMERCE

According to a report (Retail Association of India, 2019), the fast growing e-commerce market in the country will touch \$84 billion in 2021 from \$24 billion in 2017 on account of a healthy growth in organized retail sector, a report said on Tuesday. A fast growing economy and robust demographics provide a positive outlook to the consumer businesses in India. The retail market in India is expected to grow to \$1.2 trillion by 2021 from \$795 billion in 2017, it said. "Further, as the internet penetration in the country increases and more international retailers start operating in India, the share of organized retail market is expected to increase from 12 per cent in 2017 to 22-25 per cent by 2021.

"This will also be driven by the growth of e-commerce market from \$24 billion in 2017 to \$84 billion in 2021," the report indicated that increasing online shopping, smartphones usage and internet penetration across semi-urban and rural segments would help boost the sales. "India continues to hold a strong position as far as its market potential is concerned and is on its way to becoming the third largest consumer market in the world, poised to grow close to \$1.2 trillion by 2021. Given the strong retail and consumer outlook, India is expected to witness redefining trends in the consumer market which will shape the future of the retail industry. It added that consumer experience will be the key focus of the companies.

Against the backdrop of the Indian and global economies that set the stage for achieving globalization, innovation, M&A activity, and increased digitalization, consumer companies are likely to continue to reinterpret traditional levers to stimulate growth in a competitive business environment. According to an article (Bhargav, 2019), e-commerce has reported as growing channel for business and major trends of the industry can be seen as:

The Rise of the "Phygital" Stores: Many retailers are increasingly going 'Phygital' (a combination of digital and classic retail). This is now being driven predominantly by brands operating in the fashion and lifestyle category. Many Indian companies are now going 'Phygital'. For example, First cry started offline stores in 2012 and currently operates more than 300 franchise stores. Similarly, fashion retailer Myntra started a physical outlet in Bangalore for its private label 'Roadster'.

Experiential Marketing: Some of us live in a bubble and often forget that the majority lives outside of it. Experiential marketing is a great way to bridge that gap. The fact that over 55% of buyers still visit stores before they make purchases online says a lot about the potential of experiential marketing. Creating seamless online channel experiences isn't an all-new thing but, many retailers are tweaking their sales strategies to incorporate this into their marketing mix. For example, specialty tea brand "Teabox", opened a new shop in Bangalore. We will see a lot more of this for niche categories where customers feel the need to experience products before committing to purchases.

The Rise of Social Commerce: The penetration and increasing usage of internet largely attributed to telecom players like Jio has caused an increase in time being spent on social media. A staggering 93% millennial spend their leisure time on social networks. Online businesses of course, are aware of this - we've all seen shoppable posts on Instagram and Pinterest. Now, things are going beyond that. Social commerce platforms like Meesho are helping people start their own online stores. CashKaro too is building a social deal sharing platform called 'EarnKaro' by consolidating the use of referral and word of mouth marketing through social media. I expect a lot of e-commerce enablers to rise this year.

Rising Potential of E-commerce Enablers: The Indian e-commerce industry will most likely cross the \$ 100 billion mark over the next five years. The fact that brands like Flipkart have managed to garner revenues up to \$ 100 million in just one day with their Big Billion Day Sale, is exciting! Ecommerce ancillaries such as logistics, inventory management, and vendor management among others will now become indispensable. This has opened a plethora of employment opportunities in & around the e-commerce realm. Moreover, Private Equity firms like Equirus Capital are supporting e-commerce ancillary firms raise funds - a trend we expect will only grow.

Influencer Marketing Is Here to Stay: This year brands will set aside bigger budgets for Influencer Marketing and it will be a legitimate part of their marketing expenditure. We will also see brands focus on filtration of influencers to ensure they have genuine followers. This is one of the key strengths of CashKaro's influencer marketing division - Qapper. Infect platforms like Instagram and YouTube have already cracked down on fake influencers to a certain extent. Influencer Marketing will therefore really grow into its own this coming year albeit some turbulence.

Augmenting Businesses with AI and VR: Tech giants like Google and Microsoft are investing heavily in AI related endeavors. In fact, as per a recent media study, about 85% customer communications will be managed without humans by 2020. Online eyewear firm, Lenskart invested about \$1 million in US-based Ditto. Lenskart now employs Ditto's technology that enables users to try out different frames before making purchases. This is something a lot of brands have been toying with and as the technology becomes more accessible, we will see this trend grow.

Focus on Performance Based Marketing: Marketers & investors alike are more focused on ROI than ever before. Tracking marketing spends across all channels and platforms and determining its share to revenue will become a mainstay. In fact, 2019 will see more organizations tweak their business models according to the data and information offered by advanced attribution technology to optimize ROI. The focus is shifting from pure GMV to bottom line impact - something performance marketing drives well.

Retailers Eyeing Rural Markets to Drive Growth: Companies across various categories are eyeing smaller towns to open physical stores with an aim to increase their market share. Fashion e-commerce brand, Limeroad, mobile and Accessories Company, Xiaomi and fashion retailer, Raymond are looking at such markets. For example, Limeroad plans to open 3,000 offline stores in smaller towns over a period of next 3 years. To what extent these companies manage to milk these potential markets will decide the strength of this trend.

Niche E-commerce Verticals: Despite e-commerce majors like Flipkart and Amazon enjoying 75% market share, there are several online players who predominantly operate as vertical players. These vertical players are tapping on the unique consumer needs wherein people are scouting for more customized shopping experiences. However, to survive the competitive landscape of online retail, such niche retailers would need to focus on customer loyalty and shopping experience. Players such as Purple, Panchi, Nykaa and Wholesalebox are some examples of such brands. Revenue from India's e-commerce sector is expected to hit somewhere around the US \$ 120 billion in 2020. The sector is growing at a rate of 51 % on an annual basis and the growth of the Indian e-commerce will largely ride on these trends. It's going to be a positively interesting year for Indian ecommerce.

ADVANTAGES OF E-COMMERCE IN INDIA

The e-commerce boom that India has seen over the past few years has been tremendous. E-commerce has single handedly revolutionized the normal consumer's way of shopping. The economical and digital growth of all the online marketplaces are proof enough that the whole country is open to this way of shopping for their favorite clothes, accessories and even food items. However, a lot of people are still apprehensive of going online on the Internet and ordering something without physically viewing the product and even retailers are apprehensive of setting up shop after an established physical base. That is why it is important to view the advantages of e-commerce logistics, both for consumers and retailers.

Lower Establishment Cost: Because everything is based out of the internet, the setup cost for any business is minimal. Before e-commerce, you had to invest in infrastructure that would be economically and geographically viable but now everything is set up with only a few clicks. Retail stores also have to maintain a minimum number of staff whereas e-commerce websites require no such thing.

No Open or Close Time: E-commerce retailers benefit from having a 24x7 run time, without any breaks. Any physical store would have certain timings but that is not the case in e-commerce. Consumers can log in any time they want to place their orders and some websites even give late night discounts to encourage traffic during these odd hours.

Personalized Shopping Experience: For consumers, the biggest thing as an e-commerce shopper is the experience that they get while they are browsing for products. In physical establishments like malls and restaurants, customers have to browse through a lot of items to find something ideal to their taste. However,

a consumer on a website gets exactly what they want in minutes because everything is well categorized according to the choices of the consumer. It is even more convenient if you are a regular user because a lot of websites and apps remember your previous choices and provide you similar products when you log in the next time.

Return Policy: Most consumers are afraid of online shopping because they do not trust the quality or the assurance of the product. Door to door delivery does take more time compared to physically buying products but almost all products that are bought through e-commerce websites and apps guarantee return and refund policies, depending upon the type of product you choose.

CHALLENGES OF E COMMERCE

The major challenges faced by e-commerce industry in India also covered in the study and presented for understanding the consequential sides of this emerging industry. The common challenges faced by e-commerce businesses of all sizes.

Finding the right products to sell: Shopping cart platforms like Shopify have eliminated many barriers of entry. Anyone can launch an online store within days and start selling all sorts of products. Amazon is taking over the e-commerce world with their massive online product catalog. Their marketplace and fulfillment services have enabled sellers from all over the world to easily reach paying customers. Let's not forget about Aliexpress. They've simplified product sourcing by giving access to Chinese manufacturers within a couple of clicks. All of this has made it very difficult for retailers to source unique products unless you they decide to manufacture your own.

Attracting the perfect customer: Online shoppers don't shop the same way as they used to back in the day. They use Amazon to search for products (not just Google). They ask for recommendations on Social Media. They use their smartphones to read product reviews while in-store and pay for purchases using all sorts of payment methods. A lot has changed including the way they consume content and communicate online. They get easily distracted with technology and social media. Retailers must figure out where their audience is and how to attract them efficiently without killing their marketing budget.

Generating targeted traffic: Digital marketing channels are evolving. Retailers can no longer rely one type of channel to drive traffic to their online store. They must effectively leverage SEO, PPC, email, social, display ads, retargeting, mobile, shopping engines and affiliates to help drive qualified traffic to their online store. They must be visible where their audience is paying attention.

Nurturing the ideal prospects: Having a large email list is worthless if you're not actively engaging with subscribers. A small percentage of your email list will actually convert into paying customers. Nonetheless, retailers must always deliver value with their email marketing efforts. Online retailers put a lot of focus on communicating product offering as well as promotions, but prospects need more than that. Value and entertainment goes a long way but that requires more work.

Retaining customers: Attracting new customers is more expensive than retaining the current ones you already have. Retailers must implement tactics to help them get the most out of their customer base in increase customer lifetime value.

Achieving profitable long-term growth: Increasing sales is one way to grow the business but in the end, what matters most is profitability. Online retailers must always find ways to cut inventory costs, improve marketing efficiency, reduce overhead, reduce shipping costs and control order returns.

Choosing the right technology & partners: Some online retailers may face growth challenges because their technology is limiting them or they've hired the wrong partners/agencies to help them manage their projects. Retailers wanting to achieve growth must be built on a good technology foundation. They must choose the right shopping cart solution, inventory management software, email software, CRM systems, analytics and so much more. In addition, hiring the wrong partners or agencies to help you implement projects or oversee marketing campaigns may also limit your growth. Online retailers must choose carefully who to work with.

Attracting and hiring the right people to make it all happen: Let's face it, online retailers may have visions and aspirations but one true fact remains, they need the right people to help them carry out their desires. Attracting the right talent is key in order to achieve desirable online growth. Also, having the right leader plays an even bigger role. Retailers should be out there getting their name out within the online community by attending e-commerce conferences, speaking at events and networking. Employees want to work for companies that care about them and their future. Having a sense of purpose is key.

FUTURE OF E-COMMERCE SECTOR IN INDIA

Talking about the near future, the number of consumers are expected to buy online in the year 2018 was 120 million in India. Future of this sector will be deciphered by the law of 'survival of the fittest'. In the longer run, the e-commerce giants will have to fight each other for their share of the market at every level. One important aspect for consideration in future would be the 'Innovation' on the part of e-commerce businesses. It would be really difficult for new businesses in future to capture larger chunks of the market against giants such as Flipkart or Amazon unless they innovate. And, build something which is unique and basically a breakthrough in traditional e-commerce setup.

SUGGESTIONS AND RECOMMENDATIONS

The findings of the research also offer specific suggestions as:-

- More effective promotional campaigns to be undertaken to inform about the positive sides of online shopping.
- Through advertising, the organizations should assess the ambivalence of their target consumers' attitude toward online buying.
- Demographic segmentation should be implemented so that the different categories of online buyers can be targeted according to the selected segment of the market.
- A rich e-content on online shopping channels with high quality should be designed that focuses on the needs of customers.
- The online business firms necessarily invest in employees' professional training so that they can be equipped with the necessary skills to utilize e-shopping effectively.
- Top management should favor the e-shopping adoption and proper use by giving advice as well as making available the needed infrastructure.

CONCLUSION

As we all are experience a radical change in India towards the digitalization. The consumer is looking and searching more on internet to find the best deal form the sellers around India. Today we all are connected through digital channels and the increasing use of internet is creating new opportunities for digital marketers to attract the customers through digital platform. Digital marketing is cost effective and having a great commercial impact on the business. E-commerce as an alternative marketing channel is making slow but steady progress in India. With the spread of education and increasing number of people becoming technology friendly, they are slowly gaining confidence in online services. Infrastructural bottlenecks, economic disparity, vulnerabilities of the payment gateway systems, inadequate legal framework are challenges that need to be addressed by all stakeholders to promote e-commerce in the country.

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AN ANALYSIS OF TRENDS IN VENTURE CAPITAL FUNDS IN INDIA AND THE IMPACT OF COVID 19

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ABSTRACT

It is a proved fact that entrepreneurship facilitates the creation of innovative enterprises, which in turn influences the improvement in competitiveness of the economy, particularly in India, where Start Ups are playing an important role in the development of innovative entrepreneurship. Venture Capital plays a significant role by providing risk capital and handholds the development of enterprises, thereby bridges the gap where traditional sources of funds cannot participate actively in funding new ventures, brings in smart advice, hand-on management support and other skills that help the entrepreneurial vision to be converted to marketable products. It was these inputs that made India to open its doors to private venture capital and the Venture Capital has made a significant contribution to development of entrepreneurship as well as improving competitiveness. The present paper primarily deals with the role of venture capital in the development of entrepreneurship in general and Start Ups in particular. Exclusively relying on secondary sources of data collected from international and national level reports prepared by reputed corporate institutes, research papers and reports of the Ministry of MSMEs, Government of India, this paper makes a modest attempt to analyze the role of Venture Capital in India. The analysis in this paper is focused on different aspects of venture capital investments in India. Special mention was made to the role of venture capital towards the contribution of capital and broad types of venture capital as an introduction to the present analysis. In the light of this introduction, a critical analysis is presented on introduction of venture capital in India, financing the investments to entrepreneurs, trends in venture capital investments in India during 2010-17, and to the recent trends influenced by COVID 19 with reference to the deals and their values, sector-wise venture capital attracted in India. A comparative analysis is provided highlighting the impact of COVID 19 for the period of January 2019 to June 2020. An attempt is also made to analyze the significance of the role of venture capital in generation of income and employment, as a financial mechanism for achieving the sustainable development and economic growth in India, the paper focuses the need for modifying the venture capital funds to play an active role for the industrial development in India, particularly for start-up enterprises.

KEYWORDS

COVID 19, venture capital investments, start ups, deals and investments.

JEL CODES

G10, G11, G19.

INTRODUCTION

During the post-financial crisis period, a new financing eco-system for new ventures has emerged particularly in recent years which have exerted significant implications both for investors and entrepreneurs. A variety of discussions took place and debates were made on the role of alternative funding channels. As a complementary effort there was a heavy pressure from seed and later stage Companies for alternative source of financing have arrived at a conclusion that the traditional closed-end venture capital funds be made as an unique investment process. However, investors have to be cautious for identifying successful investments and the identification must depend on skills and capabilities of the investors. A special focus was laid on financing entrepreneurial companies, especially start-ups and early stage ventures as start-up scene around the world was exploding and disrupting the existing business models. It was observed that investing in entrepreneurial ventures was characterized by very high degree of uncertainty and venture capitalists can create value despite high degree of uncertainty. Much attention was laid on understanding the venture capitalists own incentives and constraints which were found linked to the fund-raising cycle and the way in which the venture capital funds were structured. Being influenced by these experiences, entrepreneurial finance was explored by the following three perspectives:

- 1) The founder's perspective
- 2) The venture capitalists perspective, and
- 3) The investors backing the venture capital.

As a result of these explorations of perspectives, venture capital has emerged as an important source of funding, which had a significant effect on reshaping the start up ecosystem. Then onwards, the corporate entities have used a common approach to identify the funding options based upon the positioning of the company in its life cycle and decomposition of capital market industry into different segments, which were suitable for their maturity stage of development, size, typical investment needs, and availability of information on corporate ownership and governance models.

Attempts were made to identify the potential funding gaps, which was to be filled through appropriate funding strategies aimed at funding the most suitable type of financial investor. It was also identical that each financial system would be affected by a certain amount of allocative efficiency resulting in a gap, referred as the "primary funding gap" between the demand for financial resources for start-up companies and the supply of early stage equity capital, particularly for young and newly created small and medium sized enterprises. Consequent to this development thinking, the domain of venture capital was identified as the only source of external financing after the choices available for internal financing referred as "insider seed money". Consequently, venture capital has emerged as one of the major alternatives over the last two decades in the form of "information venture capital market"- such as "Business angels" and "Business Angel Organization".

OBJECTIVES

A critical examination of the performance of venture capital is the primary aim of the present paper, particularly in case of start ups in India. Besides this primary objective, the present paper aims at the following supplementary objectives also:

1. To assess the contribution of venture capital and financing the start ups in India
2. To analyse the trends in private equity /venture capital during the 3 stages of investment covering the period of 11 years i.e. 2010 to 2020.
3. To present the recent trends in venture capital in India with reference to pre and post -COVID -19 periods (before 2019 and during 2019 and 2020.)
4. To examine the reasons for slow growth of venture capital funds in India, and
5. To explain the implications of COVID-19 for venture capital funds in India.

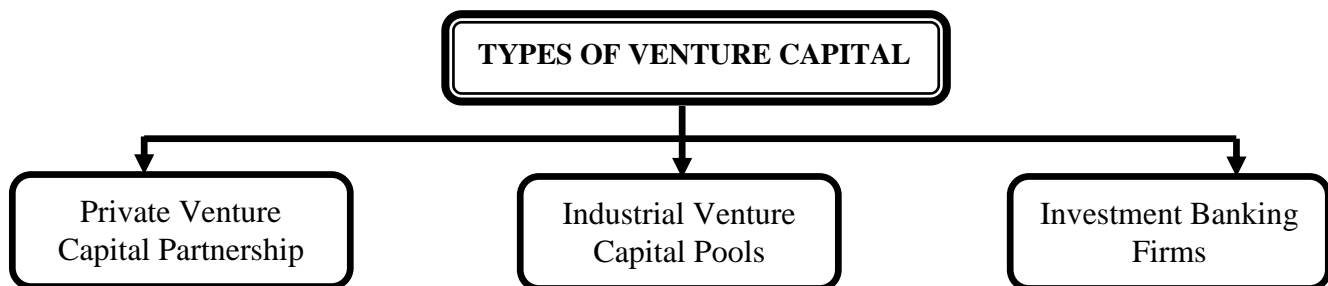
RESEARCH METHODOLOGY

The present analytical study is exclusively based on secondary data sources, focusing on a critical analysis of role of venture capital in financing start ups in India. An attempt is made to examine the recent trends in the performance of venture capital in India. Attention was paid on to present the role of venture capital investments in top sectors and specifically to present the impact of COVID-19 on venture capital investments. To satisfy the objectives mentioned above, relevant secondary data was collected for 11 years i.e. from 2010 to 2020, covering three important kinds of investments, appropriate for three stages of firms/companies in India. Relevant data and insights were gathered from International and National research reports as well as the research papers published in peer reviewed reputed journals like Bain and Company, Venture Intelligence, KPMG, EY, PREQIN PRO etc.

DISCUSSION AND RESULTS**VENTURE CAPITAL AND CONTRIBUTION TO CAPITAL**

Venture capital is a form of financing used by start-up and young companies at different stages of growth. Funds flowing into a company in the form of an investment rather than a loan, controlled by an individual or small group known as 'venture capitalists'. Venture capitalists provide large sums of money, advice and prestige by their presence. By obtaining the venture capital backing means that the business would be in the venture capitalist eyes with potential and rapid and profitable growth. Generally, venture capitalists define their investments by the business life cycle-seed financing, start-up financing, second stage financing, bridge financing and leverage buyout. If classified by life-cycle of a business, some venture capitalists prefer to invest in start-up companies, featured by high risk and potential for return, same deal with second-stage financing for expansion purposes and same venture capitalists concentrate solely on supplying funds for management-led buyouts.

The following three are the broad types of Venture Capital:



The first type of venture capital is a largest source of risk capital, aims at business which has the capability to generate a 30% return in investment each year. The capitalist like to participate in the planning and management of the business for which funds were invested.

The second type of venture capital focuses on high tech firms or companies that use state of the art technology in a unique manner, which are expected to achieve a high rate of success.

The third type of venture capital provides risk-capital for expansion and early stage financing. In general, venture capital fills the void between sources of funds for innovation-chiefly corporations, government bodies and the entrepreneurs) and traditional lower-cost sources of capital available to ongoing concerns and expects to earn a consistently superior return on investments in inherently risky business ventures.

VENTURES CAPITAL IN INDIA

In India, SEBI has laid down the activities which constitute eligible business activities qualifying for the concessions available to a recognized. Venture Capital Fund. SEBI (VC funds) Regulation -1996 defined venture capital fund as "a fund established in the form of or trust a company having a dedicated pool of capital which raises money through loan, donations, issue of securities or units as the case may be and makes or proposes to make investment in accordance with these regulations." In India, the venture capital funds are playing an important role in supplying management and marketing expertise to unlisted, new and small private business especially in technology-oriented and knowledge-intensive business or industries which might have long development cycles and which usually do not have access to conventional sources of capital. In India the activities of venture capital funds include the provision of:

- 1) Seed capital for industrial start-ups.
- 2) Additional capital to new business at various stages of their growth.
- 3) Equity financing or leverage buy-out financing to management groups for taking over other companies.
- 4) Bridge Finance
- 5) Capital to mature enterprises for expansion, diversification and restructuring.

VENTURE CAPITAL IN INDIA

Though in India, a large sophisticated financial system is in operation, in addition to formal institutions, informal financial institutions are playing a dominant role as sources of capital. Venture capital industry in India was introduced through the budget speech for the year 1988. In collaboration with ICICI, the UTI set up a venture capital fund of Rs.20 Crore for fostering industrial development during the year 1988-89. The UTI has launched Venture Capital Unit Scheme (VECAUS-I) to raise resources and with Rs.100 Crore, the second venture capital unit was set up for financing Greenfield ventures.

In 1985, the Risks Capital Funding (RCF) was sponsored by IFCI to provide positive encouragement to new entrepreneurs. It has provided risk capital and technology finance under is roof to innovative entrepreneurs and technocrats for their ventures.

The first private sector venture capital fund was set up by ANZ Grindlays Bank in India with an initial capital of Rs 10cr. In Banking Industry, the subsidiaries of SBI and Canara Bank have started the provision of venture capital funds for the development of industries such as watches, seamless metal, cement and ceramics.

In addition to the regulatory mechanism of SEBI, the government regulations and policy are very congenial for the development of venture capital industry. by sanctioning tax breaks and concessions to the venture capital funds and tax exemptions under section 10(23FB) of IT Act. However, such privileges are not allowed to shareholders of a venture capital company.

FINANCING THE INVESTMENTS TO ENTREPRENEURS

Generally, the venture capital provides funds for long-term under the following three modes of financing:

- 1) Equity
- 2) Conditional Loan and
- 3) Convertible Loans

Under the above three modes, the venture capitalists provide finance for investment to entrepreneurial ventures, particularly related to the sectors like biotechnology, medical services, communications, electronic components, and software companies. To maintain a balance between risk and profitability, venture capital firms finance the following stages of investment requirement.

STAGES OF INVESTMENT FINANCING

- 1) Seed capital and Research and Development Projects
- 2) Start-ups
- 3) Second Round Finance

- 1) Development Capital
- 2) Expansion Finance
- 3) Replacement Capital
- 4) Turn Arounds
- 5) Buyouts

Early stage financing stage need seed capital and the financial risk increases progressively as the research phase moves into the development phase. Venture capital is provided to undertake these risks and make investments in R&D projects which promise higher returns in future. Venture Capital is necessary for start-ups with inadequate finance to commercialize new technology and resultant products. Second round finance meets the financial needs for a company at the stage when the product was launched in the market and has not earned. Adequate profits to attract new investors.

Later stage financing includes development capital to purchase of new equipment plant, expansion of market and launching of product into new regions and loan. Expansion finance focuses on low risk ventures. Buy out refers to the management control by creating a separate business by separating it from their existing owners. These buyouts include management buyout (MBOs) and management buy ins (MBI). Replacement capital is another aspect of financing is to provide funds for the purchase of existing shares of owners. "Turn arounds" is a form of venture capital financing which involves medium to high risks and buying the control of a sick company.

The venture capitalists evaluate technology and study potential markets besides considering the capability of the promoter to implement the project related to early stage investments. They examine new markets and track record of the business in the later stage investments.

TRENDS OF VENTURE CAPITAL FINANCING IN INDIA

An attempt is made to analyze the trends in Venture Capital Investments made in India during the period 2010 to 2017, based on secondary sources of information. The trends are presented in Table 1:

TABLE 1: TRENDS IN PRIVATE EQUITY/ VENTURE CAPITAL DURING THE PERIOD 2010 TO 2017

Year	Value of Deals (US \$ million)	Volume of Deals (No. of Deals)
2010	8430	372
2011	9641	446
2012	7546	416
2013	9116	392
2014	11683	470
2015	19635	767
2016	16203	588
2017	26458	595

Source: EY (2018) PE/VC Agenda, India Trend Book-2018, p.13

The data presented in Table. 1. reveals that during the period 2010 to 2017, there was a significant increase in the flow of Venture Capital investments as well as in the no. of deals. The value of deals which was US \$ 8430 in 2010 has remarkably increased to US \$ 26458, with a simultaneous increase in no. of deals from 372 to 595. The year 2017 was treated as the best year in terms of the value of PE/VC investments, as the overall underlying trends of deals becoming larger and more complex.

However, it was observed that the impressive growth in absolute terms was due to the large deals by Softbank from its gigantic US\$ 100 billion Vision Investment Fund. In 2017, Softbank made investments worth of US\$ 5 billion in the Indian market and most of these investments have flown from Vision Fund, particularly for e-commerce Company, Flipkart and also US \$ 1.4 billion investments in Paytm and the US \$ 1.1 billion investments in Ola Cabs along with Tencent.

A BIRD'S EYE-VIEW OF OTHER DEALS

An analysis is also made to present the other deals and their volume particularly covering start up deals, buyout deals, credit deals, growth deals and PIPE deals and their respective values of deals during the period 2014-2017 in India. Table. 2 presents these details.

TABLE 2: OTHER DEALS AND THEIR RESPECTIVE VALUES IN INDIA DURING 2014-2017

S. No	Investments in	2014		2015		2016		2017	
		No. of Deals	Value (US\$b)	No. of Deals	Value (US\$b)	No. of Deals	Value (US\$b)	No. of Deals	Value (US\$b)
1	Start up Deals	253	1.7	454	4.8	300	2.1	372	3.5
2	Buyout Deals	11	1.3	23	3.0	29	3.9	25	3.2
3	Credit Deals	24	0.6	35	1.1	65	2.9	57	2.5
4	Growth Deals	121	6.6	213	8.5	160	5.7	159	13.5
5	PIPE Deals	61	1.6	42	2.3	34	1.6	42	3.8

Source: EY (2018) PE/VC Agenda, India Trend Book-2018, p.16-18

The following observations can be made from the data presented in Table 2:

- 1) The start-ups deals have recorded highest growth in 2015, with a drop to 300 deals with a value of US \$ 2.1 in 2016 from 454 deals with US \$ 4.8 billion. E-commerce was the sector which has received the largest amount start-up funding at US \$819 million.
- 2) Though the no. of buyout deals was 11 in 2014, picked up momentum from 2015 onwards, registering the highest number of 29 in 2016, with a drop to 25 deals. In terms of value of deals also the buyouts registered the highest value of US \$ 3.9 billion in 2016, though it was only US \$ 1.3 billion in 2014.
- 3) Credit deals, which emerged as a new mode of funding in 2016, proved as a viable means of financing for the real estate sector, as can be seen from the data that with 65 deals and representing the value of US \$ 2.9 billion in 2016, which has increased from deal value of US\$ 0.6 billion in 2014.
- 4) Growth capital account for more than 50.0 per cent share of the total value invested and the year 2017 was proved as the best year for growth deals which has touched the peak no. of deals with value of US \$ 13.5 billion.

5) For PIPE investments also 2017 was proved as the best year as they have registered highest no. of deals (42) which received investment of US \$ 3.8 billion, though an investment of US \$ 1.6 billion was invested across 61 deals.

SECTOR-WISE VENTURE CAPITAL INVESTMENTS IN INDIA

A similar view can be seen with regard to the sectoral distribution of venture capital investments in India during the year 2017, which was considered as the best year compared to the year 2016. The important sectors like financial services, real estate, e-commerce, technology, retail and consumer products, and health care recorded the highest ever investments by Venture Capitalists in India. Except for technology, which recorded a decline of 10%, all the other sectors mentioned above grew by over 50% in terms of value. Apart from these, sectors such as logistics, power and utilities and food and agriculture also witnessed good investment activity in 2017. The sector-wise amounts of venture capital attracted are presented in Table.3.

TABLE 3: GROWTH OF INVESTMENTS ACROSS SELECTED SECTORS IN INDIA DURING 2017

S. No.	Sectors Attracted investments	No. of Deals and Value of Deals (US \$ b)			
		Deal Value	% contribution to overall value	No. of Deals	% contribution to overall Deal volume
1	Financial Services	7.2	27	112	19
2	Real Estate	5.0	18	53	9
3	E-Commerce	4.7	17	60	10
4	Technology	1.8	7	121	20
5	Power and Utilities	1.3	5	NA	NA
6	Health care	1.0	4	37	6
7	Retail and Consumer	0.8	3	37	6
8	Others	4.7	18	128	22

Source: EY (2018) PE/VC Agenda, India Trend Book-2018, p. 18

Among the different major sectors that have attracted venture capital, as presented in Table. 3, reveals that Financial Services with US \$ 7.2 billion across 112 deals has attracted the highest percentage of contribution to overall value of the deals. This was followed by Real Estate sector contributing 18 % of the overall value estimated as US \$ 5.0 billion across 53 deals. E-commerce was the next succeeding sector which has attracted US \$ 4.7 billion across 17 deals during the year 2017. Other sectors also proved more effective in attracting the venture capital to the tune of 18% of the overall value, accounting for US \$ 4.7 billion across 37 deals. The sectors like technology, health care and retail and consumer have attracted investments ranging from US \$1.8 billion to US \$ 0.8 billion during 2017 in India.

SECTOR WISE DEAL SIZE-RECENT TRENDS

The experts have observed that the Indian VC industry has passed through three distinct phases in the last decade. The first phase refers to the period from 2012 to 2015, which was called as "Growth Stage". The second phase refers to the period of two years, i.e. 2016 and 2017, called as "Maturing and Moderation" period. The third phase refers to the years 2018 and 2019, called as "Renewed Optimism" period buoyed by marquee exits for investors like Flipkart, MakeMyTrip and Oyo, and a strong start-up activity in new sectors such as Fintech and SaaS along with market depth in e-commerce.

An attempt is made to present the average deal size by sectors during the third phase of passage of Venture Capital funds in India. The details are presented in Table 4:

TABLE 4: THE AVERAGE VC DEAL SIZE BY SECTORS DURING THE 3RD PHASE IN INDIA

Sectors	Average Deal Size (\$B)		No. of Deals	
	2018	2019	2018	2019
1. Consumer Tech	11.6	16.9	188	216
2. Fintech	14.3	26.7	71	609
3. Software/SaaS	11.9	12.1	50	88
4. B2B Commerce and Tech	13.2	16.8	38	82

Source: Bain and Company (2020) India Venture Capital Report-2020: Perspectives on the Funding and Start-Up Ecosystem, p.10.

It is evident from the Table.4 that 83.3 per cent of the venture capital investments was concentrated in four sectors like Fintech, Consumer Tech, B2B Commerce and Tech and Software/SaaS. The sector- Fintech was the largest sector accounting for approximately 36.8 per cent of the total investments with 609 deals during the year 2019 followed by Consumer Tech and B2B Commerce and Tech.

GROWTH IN START-UP ECOSYSTEM

It is well known that India has the best start-up ecosystem. A number of initiatives and policy changes like Startup India, Atal Innovation Mission, Digital India and assistance through SIDBI have created a congenial environment for Start-Ups and Venture Capital growth in our country. The estimations revealed that the no. of start-ups have grown at the rate of 17.0 per cent each year from 2015 onwards. The estimated trends in the rapid growth of Start-Up ecosystem in India is presented in Table 5:

TABLE 5: GROWTH IN START-UP ECOSYSTEM IN INDIA (In 100K)

Year	No. of Cumulative Start-Ups	No. of Funded Start-Ups
2015	51	3.6
2016	61	4.6
2017	68	5.4
2018	75	6.0
2019	79	6.4

Source: Bain and Company (2020) India Venture Capital Report- 2020: Perspectives on the Funding and Start-Up Ecosystem, p.22.

The data presented in Table. 5 shows that the no. of cumulative start-ups has increased from 51 to 79 (100K), indicating a percentage increase of 54.9 per cent in 2019 over 2015. Similarly, the no. of funded start-ups has also grown from 3.6 to 6.4 (100K) indicating 77.8 per cent of increase in 2019 over 2015.

IMPLICATIONS OF COVID 19 FOR VC FUNDS

The effect of COVID 19 has also touched the trends in Venture Capital funds. Venture Capital investments in the present financial year are found dropping in terms of no. of deals and value of investments. A comparative picture for the first half of 2019 and 2020 is presented to estimate the impact of COVID 19 on investments by venture capital funds. Table 6 presents the impact of COVID 19.

TABLE 6: VENTURE CAPITAL INVESTMENTS BY TOP SECTORS (In \$ MILLION)

S. No	Top sectors	First Half of 2019	Second Half of 2019	First Half of 2020*
1	Fintech	600	928	547
2	Healthcare	414	471	370
3	Education	108	146	244
4	Food	287	391	243
5	E-commerce	1257	1764	202
6	Artificial Intelligence	134	127	112
7	Consumer Brands	138	104	73
Top 7 Sectors		2938	3931	1791

Note: *Till June, 6, 2020

Source: Report of the Venture Intelligence -2020 and howindialives.com, 23rd June, 2020

The top sectors presented in Table. 6 reveals that the sector drivers have changed with a negligible changes brought about by the COVID 19. E- commerce is the largest loser as this sector has attracted \$1257 million and \$1764 million during the first and second half of 2019, could attract only \$ 202 million in the first half of 2020, losing more than a billion dollars (\$1055 million). This was followed by health care sector by losing \$136 million in the first half of 2020, compared to first half of 2019. The sectors like food (\$ -44 million), artificial intelligence (\$-22 million) and consumer brands (\$ -65 million) were also the losers during the first half of 2020, compared to first half of 2019. The venture capital investments have witnessed a decrease to the extent of 39.0 per cent in firsts half of 2020, as compared to first half of 2019 and a decline of 54.4 per cent compared to second half of 2019.

IMPACT OF COVID 19 ON VENTURE CAPITAL

The first case of corona virus was registered on January, 30th in India and the efforts of the Government to overdrive to contain virus were started during the second half of March, 2020. Though there were more investments in Start-Ups during the months of January and February, 2020, after these two months the Start-Ups have experienced the situation of lack of funds and many companies have announced layoffs. April and May, 2020 have proved more brutal for start-ups and the no. of deals have decreased to an average of 50 a month during January and April, to 20 in May and only one- fourth of the investments were made in May, 2020, as compared to May 2019, though there was a slight increase in the month of June, 2020. The details of the drop in venture capital investments in Indian start-ups are presented in Table 7:

TABLE 7: IMPACT OF COVID ON VENTURE CAPITAL :2019 AND 2020

Months	Venture Capital Investments in Indian Start-Ups (in \$ Million)		Percentage Increase (+)/ Decrease (-) in 2020 over 2019
	2019	2020	
January	1169	709	-- 39.3
February	281	791	+181.5
March	786	392	-- 50.1
April	574	443	-- 22.8
May	788	202	--74.4
June	640	240	--62.5
For all the months	4238	2777	--34.5

Source: Report of the Venture Intelligence -2020 and www.howindialives.com, 23rd June, 2020

The estimations of drop in venture capital investments, as presented in Table.7, reveals that there was a decline of venture capital investments to the tune of \$ 1461 million (34.5 per cent) in the first half of 2020 compared to the first half of 2019. Except for the month of February, for all the 5 months, there was a decline in venture capital investments in Indian Start-Ups and highest decline was registered for the months of May and June.

CONCLUSION

In spite of the availability of vast pool of scientific and technical research abilities, India is still recognized as a low cost developer and service provider. Though India has skilled manpower, advantage of English-speaking human resources and cheap labor, its leadership is on a slipping edge as other countries such as Philippines, China and Vietnam, which are trying to grab the position of India. In recent years, the business activities and operations of the industries are getting more and more technology-oriented. Being attracted by the congenial business environment available in India, many foreign companies are getting located around Delhi, Mumbai, Bangalore, Hyderabad, Visakhapatnam, Tirupati and Sathyavedu, which are offering a good no. of employment opportunities to young, skilled and talented people. It is to be admitted here that there would be a phenomenal increase in start-up industries, which provide employment opportunities, if there would be proper, adequate and effective supply of venture capital funds. This can happen only when the right environment is created to understand the global forces and the operational features of life cycle of borrowing companies and it is sure that we can create a right replica of Silicon Valley in India, a phenomenon for the world to watch. No doubt, the COVID 19 crisis has brought up significant changes in the no. of deals and volume of venture capital investments as well as in start-up investment patterns, there is a shift in their focus from tech-centric start-ups to the ones operating in sectors like FMCG, on-line delivery of essential commodities, entertainment within the house, etc., It is to be noted that start-ups in India like EdTech, FinTech and Cyber Security have been promoting their user demand, forming the important sources of attracting the investors. In addition, the efforts of the Government of India to extend \$ 130K for the development of an encrypted video conferencing solution encourage the development of start-ups in India during the post-COVID 19 crisis. Let us hope that the shifts in focus areas as well as the supporting efforts of the Government to unlock the effect of the present health crisis prove fruitful for the increased flow of venture capital investments for the improvements in productivity of the industrial ventures.

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A COMPARATIVE STUDY OF MOBILE BANKING TRANSACTION OF NATIONALIZED BANKS AND FIVE LEADING PRIVATE SECTOR BANKS OF INDIA

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ABSTRACT

Our country has witnessed a massive development in communication system since the beginning of the current century and it has changed the entire scenario of our lifestyle. There were 116.17 crore mobile phone subscribers in our country as on 31st March, 2019, which indicates that it has become an integral part of our daily lifestyle. With this changing scenario, our banking system has also changed a lot. Mobile banking is substituting the conventional banking slowly. The decision of demonetization by the Government of India on 8th November, 2016 has accelerated the pace of mobile banking transaction in our economy sharply. The present paper is aimed to observe the trend of mobile banking transactions of nationalized banks and five leading private sector banks in recent past specially before and after demonetization. The study is done on the basis of secondary data and simple statistical tools has been used to analyze data. The study reveals that the growth of progress of mobile banking transactions, both in terms of volume and value, of the nationalized banks are better than the private sector banks under study but the transaction value of private sector banks under study are more than the nationalized banks in the study period with some exception. The study concludes that the decision of demonetization by the government of India has put a deep impact on the progress of mobile banking transaction specially to the nationalized banks as it has mandated a number of account holders to accept this cashless mode of banking transaction.

KEYWORDS

communication system, mobile banking, demonetization, nationalized banks, private sector banks.

JEL CODES

G21, O10, O30.

INTRODUCTION

Banks and other financial institutions play an important role in the development of industry and trade. Banks act as a custodian of wealth on one hand and act as a key provider financial resources for economic development on the other hand. The world is changing very fast. New concepts, ideas and technological developments have changed our life in every respect. There has been a revolution in communication system and it has changed the entire scenario of our lifestyle. As per Telecom Statistics India- 2019 (published by Ministry of Communication, Government of India), at the end of March 2001, total number of mobile phone subscribers in our country were 3.58 million and number of landline subscribers were 32.70 million. But at the end of March 2019, total number of mobile phone subscribers were 1161.71 million and number of landline subscribers were 21.70 million. It indicates that in first two decades of the present century, number of mobile phone subscribers have been increased by 32350% whereas number of landline users have decreased by 33.6%. The number of internet subscribers at the end of March 2015 were 302.36 million, of which 194.80 million were from urban area and 107.56 million were from rural area. At the end of March 2019, the total number of internet users became 636.73 million, of which 409.72 million were from urban area and 221.01 million were from rural area (data source: Telecom Statistics India- 2019). It indicates an overall increment of 110.6% of total internet users in our country during this period. In urban areas, the increment is 110.3% and in rural areas, the increment is 105.5% which indicates that the increasing trend is similar in both urban and rural areas. These figures clearly indicate that mobile phone has become an inseparable part of our daily life. Almost all facilities like education, office work, shopping, entertainment etc. are now at our fingertip. Technological advancement and upgradation have made possible to perform lots of work through mobile phone. Banking sector has also observed this technological advancement in the recent past. Mobile banking is getting popularity among the mobile phone users and is changing the traditional banking concepts.

MOBILE BANKING: DEFINITION AND CONCEPT

Mobile banking may be defined as the providing banking services to customers on their mobile devices specifically the operations of bank deposit, current and savings account. It is a service provided by the bank or other financial institutions to its customers to conduct financial transactions using a mobile device. Normally, three types of mobile banking services are provided by the banks. These are - mobile banking over Wireless Application Protocol or WAP, mobile banking over SMS which is also known as SMS banking and mobile banking over Unstructured Supplementary Service Data or USSD.

In case of mobile banking over WAP, the customers need to download the mobile application or App of the concerned bank on their smartphone, getting registered for mobile banking and then use it to avail various services provided by the bank such as they can access their accounts and carry out different banking transactions, can check their bank balance, can get e-passbook and account statement, can transfer fund through Immediate Payment Service (IMPS), National Electronic Fund Transfer (NEFT) or Real Time Gross Settlement (RTGS), can pay different bills, can locate nearest branch or ATM (Automated Teller Machine). They can also request for new cheque book, debit or credit card through WAP. The mobile application facility is provided by bank at free of cost, however there may involve some charges on process of fund transfer. An internet connection and a smart phone is the must to avail this facility. For mobile banking over SMS, the customer needs to register his or her mobile number with bank. The bank provides services like bank balance or mini- statement of last specific number of transactions of the concerned account of the customer to the registered mobile number through SMS on demand. The customer need not to have a smart phone or internet connection to avail this facility. The banks usually levy an annual charge to the customer to provide this facility. Mobile banking over USSD is the facility offered by the bank to the customers who do not own a smart phone or can't access internet facility. Only a basic feature mobile phone with connection is enough to avail this mobile banking service. The main objective of it is to provide financial deepening and inclusion of unbanked society to the mainstream banking services. It is quite popular in rural areas where majority of the people do not own smartphone or can't access internet. To avail mobile banking facility over USSD, a customer needs to register his or her mobile number with the bank and the same for USSD facility. Different services like balance enquiry, mini- statement, fund transfer etc. are offered by the bank through his facility. A nominal amount is charged by the bank to its customers for transactions.

REVIEW OF LITERATURE

According to Sudhakar A. M. and Suryanarayana (2011), a revolutionary approach to banking transactions is witnessed with the launch of mobile banking services. This has created a strong connectivity between the banks and the customers in terms of minimum time and transaction cost.

Vinayagamoorthy and Sankar (2012) opined that with the help of mobile phone, various functions can be performed through mobile banking such as functions like checking of account history, mini statement, access to card statements, SMS alert, checking of balance etc. Rural customers can also access mobile banking whenever they needed.

Sharma and Kaur (2016) in their study revealed that smartphone apps are preferred by customers than mobile banking websites and SMS/ text messaging. They also found that both mobile and non-mobile bankers mainly check balances & transaction history and transfer money between own accounts through mobile banking.

Sharma and Singh (2012) in their study found that most of the customers prefer information-based services rather than financial services provided by the banks due to security reasons, network problem or insufficient operating guidance.

V. Devadevan (2013) in his study found that technical problem increases with the increasing number of mobile banking customers like problems in banking transactions and password/ MPIN. He put emphasis on awareness creation among the existing customers and providing special benefits for using mobile banking to increase its users.

Goyal, Pandey and Batra (2012) in their study evaluated perceptions and opinions of urban banking users. Their study showed 'mobile handset compatibility' is an important issue in mobile banking, due to availability of various handset models (supporting different types of technology) in the market. They opined that banks must coordinate with the mobile handset manufacturers so that all handsets become compatible with single mobile banking technology.

OBJECTIVES OF THE STUDY

Objectives of the present paper is to:

1. Study recent scenario of mobile banking transactions among nationalized banks and five leading private sector banks of India
2. Study the trend of mobile banking transactions in pre and post demonetization period.
3. Observe any significant change in pattern of transaction in post demonetization period.

RESEARCH METHODOLOGY

There were 20 nationalized banks (including SBI and its associate banks considering a single one) and 22 private sector banks were operating in India as on 31st March, 2019. The leading five private sector banks in terms of total assets and net sales (as per latest balance sheet available) registered in Bombay Stock Exchange are HDFC Bank, ICICI Bank, Axis Bank, Kotak- Mahindra Bank and Yes Bank. The present study is done on the basis of secondary data relating to mobile banking transactions done by nationalized banks of India including SBI and its associate banks and five leading private sector banks. The study period is taken from the year 2014 to 2019. The data has been collected from the monthly data released by Reserve Bank of India. Reserve Bank of India releases month-wise data on mobile banking transactions. In the present paper, data of month of March from the year 2014 to 2019 have been taken for the study. The data presented indicates the figures of a single month i.e. month of March from the year 2014 to 2019 and not of the whole year. Simple statistical tools have been used to analyze the data.

DATA PRESENTATION AND ANALYSIS

TABLE 1: VOLUME OF MOBILE BANKING TRANSACTION OF NATIONALIZED BANKS OF INDIA DURING THE STUDY PERIOD (volume figures are in Thousands)

Bank Name	Mar' 14	Mar' 15	Mar' 16	Growth up to 2016	Mar' 17	Mar' 18	Mar' 19	Overall Growth	Growth since 2016
	Volume	Volume	Volume	%	Volume	Volume	Volume	%	%
Allahabad Bank	5.23	22.36	162.71	3013	350.10	2763.83	13371.04	255707	8118
Andhra Bank	23.25	35.43	114.32	392	604.66	3922.42	19133.91	82207	16638
Bank of Baroda	81.51	164.81	834.10	923	2196.10	3984.56	9400.60	11434	1027
Bank of India	0.05	14.44	21.50	42051	13.27	8579.22	38124.32	74753461	177247
Bank of Maharashtra	0.14	0.06	61.55	44823	140.65	1962.34	10195.27	7441702	16466
Canara Bank	82.79	268.89	1029.40	1143	3153.18	4628.98	21544.11	25923	1993
Central Bank of India	1.26	7.22	89.03	6988	435.79	497.66	622.40	49454	599
Corporation Bank	14.19	34.94	13.32	-6	194.57	2667.03	11976.72	84279	89802
Dena Bank	1.78	4.35	10.05	464	24.10	565.35	3622.20	203280	35953
Indian Bank	4.44	2.25	290.85	6454	1343.26	2679.51	11784.72	265441	3952
Indian Overseas Bank	0.47	0.94	180.94	38074	554.00	1889.41	10442.08	2202870	5671
Oriental Bank of Commerce	5.47	7.08	13.32	144	86.16	1286.18	4774.18	87211	35737
Punjab & Sind Bank	0.07	15.28	28.33	38188	138.66	34.33	46.80	63147	65
Punjab National Bank	19.71	31.94	240.37	1120	711.25	661.72	834.63	4135	247
SBI & its Associate Bank	5597.40	8446.05	17559.25	214	26684.77	44621.86	145159.53	2493	727
Syndicate Bank	2.07	68.66	206.60	9861	712.76	1763.95	8297.37	399966	3916
UCO Bank	10.34	34.04	298.02	2784	579.97	2055.99	6562.55	63398	2102
Union Bank of India	68.69	199.15	629.20	816	1108.84	1542.91	36142.56	52515	5644
United Bank of India	5.82	10.28	121.70	1991	261.01	243.14	354.24	5986	191
Vijaya Bank	12.02	129.57	351.80	2826	1135.68	861.06	982.17	8069	179
Total	5936.70	9497.74	22256.36	275	40428.78	87211.45	353371.40	5852	1488

(data source: <https://www.rbi.org.in>)

The above table indicates that the number of mobile banking transactions have been increased at a rapid pace during the study period in case of all nationalised banks. Total number of transactions have been increased from 59 lakhs 36 thousand in March' 2014 to 35 crore 33 lakh and 71 thousand in March' 2019, resulting an overall increment of 5852%. An increment of 275% has been observed between the period March' 2014 to March' 2016 i.e. in pre-demonetisation period under study and 1488% between the period March' 2016 and March' 2019 i.e. in post-demonetisation period under study.

The table also depicts that SBI and its associate banks share majority of the transactions taken place throughout the study period, though this share has been gradually decreased. The share of number of transactions of SBI and its associate banks with total number of transactions taken place by all nationalised banks was 94% in 2014 and it became 89% in 2015, 79% in 2016, 66% in 2017, 51% in 2018 and 41% in 2019.

The table shows that except SBI and its associate banks, the banks who are leaders in terms of number of mobile banking transactions among nationalised banks during the study period are Canara Bank, Bank of Baroda, Union Bank of India, Andhra Bank, Vijaya Bank and Indian Bank.

The maximum growth in number of mobile banking transactions was observed in case of Bank of India followed by Bank of Maharashtra and Indian Overseas Bank in the overall study period. The lowest growth was observed in case of SBI and its associate banks during the same period. Maximum growth was observed in case of Bank of Maharashtra followed by Bank of India and Punjab & Sind Bank in pre-demonetisation period under study and Corporation Bank registered a negative growth during the same period. Again, maximum growth was found in case of Bank of India followed by Corporation Bank and Dena Bank in post-demonetisation period under study and Punjab & Sind Bank registered the lowest growth during the same period.

TABLE 2: VOLUME OF MOBILE BANKING TRANSACTION OF LEADING PRIVATE SECTOR BANKS UNDER STUDY DURING THE STUDY PERIOD (volume figures are in Thousands)

Bank Name	Mar' 14	Mar' 15	Mar' 16	Growth up to 2016	Mar' 17	Mar' 18	Mar' 19	Overall Growth	Growth since 2016
	Volume	Volume	Volume	%	Volume	Volume	Volume	%	%
AXIS Bank	1636.65	2646.48	7896.46	382	11022.67	31096.31	83925.33	5028	963
HDFC Bank	317.18	1720.76	6353.80	1903	31550.65	3696.31	60057.31	18835	845
ICICI Bank	1778.96	3775.22	7820.78	340	16619.37	23426.77	59826.12	3263	665
Kotak Mahindra Bank	252.47	661.24	2062.47	717	4468.47	9647.00	28731.46	11280	1293
Yes Bank	349.81	530.09	909.16	160	953.15	1234.20	6306.86	1703	594
Total	4335.07	9333.79	25042.67	478	64614.31	69100.59	238847.08	5410	854

(data source: <https://www.rbi.org.in>)

The data on the above table reveals that total number of transactions by five leading private sector banks under study have also been increased from 43 lakh 35 thousand in March' 2014 to 23 crore 88 lakh and 47 thousand in March' 2019 resulting an overall increase of 5410%. There is an overall increment of 478% from March' 2014 to March' 2016 i.e. in pre-demonetisation period under study and 854% from March' 2016 to March' 2019 i.e. in post demonetisation period under study in number of mobile banking transactions by these five banks. The maximum increment in number of mobile banking transaction during the entire study period as well as pre-demonetisation period was observed in case of HDFC Bank followed by Kotak Mahindra Bank. However, highest growth was observed in case of Kotak Mahindra Bank followed by Axis Bank in post demonetisation period under study.

TABLE 3: VALUE OF MOBILE BANKING TRANSACTION OF NATIONALIZED BANKS DURING THE STUDY PERIOD (value figures are in ₹ Crore)

Bank Name	Mar' 14	Mar' 15	Mar' 16	Growth up to 2016	Mar' 17	Mar' 18	Mar' 19	Overall Growth	Growth since 2016
	Value	Value	Value	%	Value	Value	Value	%	%
Allahabad Bank	1.55	5.21	71.06	4491	281.25	968.13	3398.53	219439	4682
Andhra Bank	4.92	17.03	85.48	1638	512.36	1725.64	5439.73	110504	6264
Bank of Baroda	28.61	70.13	327.73	1045	1099.17	2804.86	7855.11	27355	2297
Bank of India	0.01	10.22	16.09	268132	9.23	1499.53	10393.50	173224885	64480
Bank of Maharashtra	0.06	0.03	71.72	128577	175.69	544.31	2094.43	3757542	2820
Canara Bank	11.06	1715.25	601.87	5341	2308.42	1910.13	6891.94	62202	1045
Central Bank of India	0.25	5.12	62.48	25197	193.78	330.55	538.80	218037	762
Corporation Bank	9.72	30.06	11.78	21	232.72	838.78	3349.17	34350	28329
Dena Bank	1.22	3.15	8.02	558	20.09	203.58	1420.44	116502	17612
Indian Bank	0.58	0.44	185.55	31812	776.29	1320.97	3400.46	584724	1733
Indian Overseas bank	0.15	0.18	165.49	110719	794.61	574.75	2483.43	1662860	1401
Oriental Bank of Commerce	3.95	5.58	117.82	2883	87.47	491.64	1032.93	26052	777
Punjab & Sind bank	0.02	2.87	12.83	77607	82.82	25.86	40.18	243371	213
Punjab National bank	15.94	29.79	67.48	323	710.54	609.07	892.02	5497	1222
SBI & its Associate banks	661.84	1681.06	20048.15	2929	69690.49	22952.53	127533.03	19169	536
Syndicate Bank	0.44	15.66	79.45	17945	407.98	723.70	2298.93	522028	2793
UCO Bank	1.51	7.14	123.28	8050	470.35	976.03	2027.39	133935	1545
Union Bank of India	23.34	820.93	387.58	1560	1003.31	5665.24	9132.90	39027	2256
United Bank of India	1.53	3.02	57.85	3669	160.01	227.29	341.68	22162	491
Vijaya Bank	4.42	11.64	154.16	3391	511.44	675.10	962.90	21708	525
Total	771.12	4434.51	22655.87	2838	79528.02	45067.69	191527.49	24738	745

(data source: <https://www.rbi.org.in>)

The above table represents the value of mobile banking transactions taken place by the nationalised banks during the study period. From the table it is found that there is a robust increment of about 250 times in mobile transaction value during the study period. The value of transaction has been increased from ₹ 771.12 Crore in March' 2014 to ₹ 191527.49 Crore in March' 2019. The total value of mobile banking transactions by the nationalised banks has been increased by 2838% from March 2014 to March 2016 i.e. in pre-demonetisation period under study and about 745% from March 2016 to March 2019 i.e. in post demonetisation period under study. The table shows that SBI and its associate banks share major portion of total mobile banking transaction value done by the nationalised banks throughout the study period.

The table shows that SBI and its associate banks shared 86% of total transaction value in March 2014, 38% in March 2015, 88% in March 2016 and 2017, 45% in March 2018 and 66% in March 2019. In March 2015, the value of mobile banking transaction of Canara Bank was ₹ 1715. 25 Crore which was more than transaction value of SBI and its associate banks. This is the only incident where the mobile transaction value of a nationalised bank is more than the SBI and its associate banks in the study period.

The table shows that except SBI and its associate banks, the banks who are leaders in terms of volume of mobile banking transactions among nationalised banks during the study period are Canara Bank, Bank of Baroda and Union Bank of India. Punjab National Bank, Corporation Bank, Indian Bank, Indian Overseas Bank and Andhra Bank have also registered good amount of transaction during the study period. Bank of India registered a growth of nearly 7 times in value of transaction in March' 2019 compared to March' 2018 which was the highest transaction value after SBI and its associate banks in the same year.

Bank of India has registered highest growth in value of mobile banking transaction in overall study period followed by Bank of Maharashtra and Indian Overseas Bank. Punjab National Bank registered lowest growth in value of transaction during the same period. Bank of Maharashtra registered highest growth in value of mobile banking transaction in pre-demonetisation period under study followed by Bank of India and Indian Overseas Bank. Corporation Bank registered lowest growth in transaction value during the same period. Again, Bank of India registered highest growth in value of mobile banking transaction in post-demonetisation period under study followed by Corporation Bank and Dena Bank. Punjab & Sind Bank registered the lowest growth in mobile banking transaction during the same period.

TABLE 4: VALUE OF MOBILE BANKING TRANSACTION OF NATIONALIZED BANKS DURING THE STUDY PERIOD (value figures are in ₹ Crore)

Bank Name	Mar' 14	Mar' 15	Mar' 16	Growth up to 2016	Mar' 17	Mar' 18	Mar' 19	Overall Growth	Growth since 2016
	Value	Value	Value	%	Value	Value	Value	%	%
AXIS Bank	578.91	1970.47	7552.10	1205	12890.37	23711.00	44508.60	7588	489
HDFC Bank	700.35	6030.58	10430.85	1389	18780.18	4893.26	52584.37	7408	404
ICICI Bank	786.02	2515.32	11423.49	1353	44533.33	23867.30	45021.74	5628	294
Kotak Mahindra Bank	359.30	1057.54	2882.63	702	6704.89	11554.33	24482.19	6714	749
Yes Bank	157.32	241.75	405.39	158	860.87	2409.06	5471.92	3378	1250
Total	2581.90	11815.66	32694.46	1166	83769.64	66434.95	172068.82	6564	426

(data source: <https://www.rbi.org.in>)

The above table represents the value of mobile banking transactions taken place by the leading private sector banks under study during the study period. From the table it is found that there is an overall increment of 6564% in mobile banking transactions by the leading private sector banks under study during the entire study period. The overall growth of transactions during the period of March' 2014 to March' 2016 i.e. during the pre-demonetisation period was 1166% and during the period of March' 2016 to March' 2019 i.e. during the post-demonetisation period was 166%. Axis Bank, ICICI Bank and HDFC Bank are the top three banks in terms of volume of mobile banking transactions during the entire study period except in March' 2018 where volume of transaction of Kotak Mahindra Bank was more than HDFC Bank. The table shows that Axis Bank gained maximum growth in the overall study period followed by HDFC Bank and Kotak Mahindra bank; HDFC Bank gained maximum in pre-demonetisation period under study and Yes Bank gained maximum growth in post-demonetisation period under study followed by Kotak Mahindra Bank and Axis Bank.

TABLE 5: COMPARATIVE ANALYSIS OF OVERALL TRANSACTION OF NATIONALISED BANKS AND LEADING PRIVATE SECTOR BANKS UNDER STUDY

	Mar' 14	Mar' 15	Mar' 16	Mar' 17	Mar' 18	Mar' 19
No. of Transactions (in Thousands)						
Nationalised Banks	5936.69	9497.75	22256.35	40429.00	87211.45	353371.40
Private Sector Banks	4335.06	9333.79	25042.67	64614.65	69100.59	238847.08
Ratio	1.37	1.02	0.89	0.63	1.26	1.48
Value of Transaction (in ₹ Crore)						
Nationalised Banks	771.12	4434.51	22655.9	79528.02	45067.67	191527.50
Private Sector Banks	2581.90	11815.65	32694.46	83769.64	66434.95	172068.82
Ratio	0.30	0.38	0.69	0.95	0.68	1.11
Value per Transaction (₹)						
Nationalised Banks	1291.44	4669.01	10179.52	19671.03	5167.63	5420.01
Private Sector Banks	5955.86	12659.01	13055.50	12964.50	9614.24	7204.14

(data source: <https://www.rbi.org.in>)

The above table reveals that the number of mobile banking transactions of Nationalised Banks at the beginning of the study period i.e. on March 2014 was 1.37 times higher than the Private Sector Banks under study, but the value of mobile banking transactions of nationalised Banks was only 0.30 times of the private sector banks under study. This picture is changed a lot in March 2017 when the number of transactions of Private Sector Banks under study was much higher than nationalised banks compared to the value of transaction. Value per transaction of the Nationalised banks were also much higher than the private sector banks under study. The number of mobile banking transactions by the nationalised banks on March 2019 was 1.48 times higher than the private sector banks under study, but the value of transactions is only 1.11 times higher than the private sector banks under study.

MAJOR FINDINGS

It is clear from the statistics that the overall performance of the private sector banks under study in relation of mobile banking transaction is relatively better than the nationalised banks throughout the study period with some exceptions. But at the same time the nationalised banks have improved a lot during the study period in mobile banking transactions. Both the volume and value of transactions as well as the average value per transaction have been increased a lot compared to the private sector banks under study. In the beginning of the study period i.e. on March' 2014, SBI and its associate banks had occupied lion's share of total value of mobile banking transaction done by nationalised banks and the combined value of transaction done by all other nationalised banks was lower than the transaction value of Yes Bank, which was the lowest among the private sector banks under study. The value of transaction of SBI and its associate banks was also on third position after HDFC and Axis bank. It clearly indicates that the nationalised banks except SBI and its associate banks have failed to put their footprint in the arena of mobile banking transactions at the beginning of the study period. Mobile banking transactions were confined mainly to SBI and its associate banks among nationalised banks and some leading private sector banks including banks under present study. But the situation has been changed a lot during the study period. All the nationalised banks have registered robust growth both in volume and value of transaction during the study period and the total mobile transaction value of the nationalised banks have been increased by about 250 times. On March' 2014, value of mobile banking transaction of all nationalised banks was only 30% of transactions of private sector banks under study and share of SBI and its associate banks was about 85% of total transaction value of nationalised banks. But on March' 2019, value of mobile banking transaction of all nationalised banks is 111% of transactions of private sector banks under study and share of SBI and its associate banks is about 67% of total transaction value of nationalised banks. SBI and its associate banks occupied the leading position in respect of mobile banking transaction among all banks in India on March' 2019. The total value of mobile banking transaction of nationalised banks except SBI and its associate banks have been increased from ₹104.85 crore in March' 2014 to ₹63994.50 crore in March' 2019 resulting an overall increase of 60647%.

The data of March' 2016 and March' 2017 reveals that the overall transaction value of nationalised banks have been increased by ₹56872.12 Crore (250%) out of which transaction value of SBI and its associate banks have been increased by ₹49642.34 Crore (248%) and other nationalised banks by ₹7229.96 Crore (277%), resulting almost similar growth in SBI group and other nationalised banks. On the other hand, the overall transaction value of private sector banks under study have been increased by ₹51075.18 Crore (156%) resulting a lower growth compared to the nationalised banks as a whole. Again the data of the same period reveals that overall transaction volume of nationalised banks has been increased by about 1 crore 81 lakh and 72 thousand (82%) out of which transaction volume of SBI group has been increased by about 91 lakhs and 26 thousand (52%) and other nationalised banks by 90 lakhs and 47 thousand (193%), resulting a sharp growth in transaction volume of other nationalised banks compared to SBI group. On the other hand, the overall transaction value of the private sector banks under study has been increased by 3 Crore 95 lakh and 72 thousand (158%). So, the growth of transaction volume and value of the private sector banks under study is almost same during the period March' 2016 and March' 2017 but in case of SBI group as well as other nationalised banks, the growth of value of transaction is much higher than volume of transaction. Average transaction value of all nationalised banks has been increased during March' 2016 and March' 2017 from ₹10179.52 to ₹19671.03, the same in case of SBI group has been increased from ₹11417.43 to ₹26115.98 and in case of other nationalised banks have been increased from ₹5551.83 to ₹7157.82. On the other hand, average transaction value of private sector banks under study has been decreased from ₹13055.50 to ₹12964.50 during the same period.

CONCLUSION

From the statistics it is found that the number of mobile banking transactions of private sector banks under study was lower than the nationalised banks during the study period except March' 2016 and March' 2017, but the value of transaction of the same was higher in the same period except March' 2019. Value per transaction of the private sector banks under study was also higher than the nationalised banks during the study period except March' 2017. But at the same time, it is also evident from the statistics that growth in volume and value of mobile banking transactions of nationalised banks are much better than the private sector banks under study. Immediately after demonetisation i.e. in March' 2017 of our present study, both volume and value of mobile banking transaction of both nationalised banks and private sector banks under study have been increased very sharply, but a negative growth was found in value of transaction of both category of banks in the very next year i.e. in March 2018. Again, a very sharp growth was found in value of transaction in March' 2019 in both category of banks. It gives a clear-cut indication that the decision of demonetisation by Government of India put a deep impact on overall transaction pattern of the country. Immediately after demonetisation, a large section of account holder was forced to adopt cashless system of banking transaction, a portion of which was shifted back to traditional system of banking transaction. But the benefit and easiness of mobile banking has brought back a number of existing as well as new customers in its system.

The business of private sector banks spread mainly in metropolitan and urban areas though they are spreading their business in rural areas also after RBI mandate to open at least 25% of new branch in rural areas. The targeted customer of the private sector banks is generally high-income earners. Presently the private sector banks have reached to more tech-savvy and higher income earner people. As a result, though the nationalised banks have registered a greater number of transactions, the total transaction value as well as average value per transaction is lower than the private sector banks under study with the exceptions stated earlier. On the other hand, the nationalised banks have spread their business both in metropolitan cities and remote rural areas. One of the basic objectives of the nationalised banks are to bring more and more unbanked people under the umbrella of banking system. So, the growth of mobile banking transaction of nationalised banks clearly indicates that the account holders from every section of the society are accepting the cashless mode of banking transaction through mobile rapidly. This is a favourable sign for our economy as it will help to make our economy a cashless one. But still a long way to go. A major portion of our population resides at rural areas where average income, progress of education, technological benefits, availability of banking and financial facilities are much lower than the metropolitan and urban areas. A large section of the rural population does not operate their bank accounts regularly. Proper infrastructure, financial literacy and training campaign, availability of network system and last but not the least better income opportunity will be more helpful to remove the obstacles and move our country towards a cashless economy.

LIMITATION OF THE STUDY

The present study is done on the basis of secondary data only. The data of only one month i.e. month of March during the study period of 2014 to 2019 has been taken into consideration. The result would have been different if the data of any other month or the whole year was taken into consideration. Again, in the present study, the data of nationalized banks and five leading private sector banks have been taken into consideration. But the data of other scheduled commercial banks and payment banks, which are operating in India have not been taken into consideration. As a result, the present trend of mobile banking transaction of total banking sector could not be judged.

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THE EFFECT OF THE INTERNET OF THINGS ON CUSTOMER ENGAGEMENT: AN EMPIRICAL STUDY OF INSURANCE COMPANIES IN INDIA

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ABSTRACT

IoT is the most remarkable prominent tool for improving the efficiency of the insurance sector in the long-term perspective, works as a catalyst to increase the performance of the insurance sector for handling the claim settlement and other services that will boost up the to increase the customer engagement. The main aim of this study is to empirically examine the factors influencing the internet of things (IoT) and customer experience of the Insurance Companies operating in India. In the present era, the internet of things is the backbone of the insurance sectors and focusing to build up the customer engagement in any organization and the success of any organization depends on the effective usages the internet of things for claims settlement and other services decisions regarding the various insurance distribution channels management. The major objective of the study is to explore the opportunities of the internet of things to induce customer engagement in the insurance sector and provide very practically evidence-based information to companies related to the insurance sector. For the purpose of the study, 300 respondents from major cities of west Uttar Pradesh and NCR were taken through 12 insurance companies. This paper provides practically result-oriented information about the internet of things with customer experience in the insurance sector. This study reflects the direction to practitioners engaged with the insurance sector for understanding the essence of the internet of things to build customer engagement in the insurance services and to procure competitive advantage.

KEYWORDS

Internet of things (IoT), customer engagement, insurance sector, customer experience.

JEL CODE

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1. INTRODUCTION

The internet of things has played a significant role around the globe and changed the model of business, exploring the opportunities for insurers to develop the new products, redefine the distribution channels, and helps to diagnose the future predictions of business. IoT technologies enable insurance companies to diagnose the risks in the present environment of business and also help to forecast the risk in future business. In the insurance sector, most of the customers are engaged with their agents and brokers through the use of IoT.

IoT has been deeply affected customer relationship management and focusing on leveraging technologies for the targeted customer segments of the insurance industries. Insurers have been targeting on digital technologies such as to innovate customers and distribution relationship management. IoT lead to a change in the behavior of the entire population across geographical boundaries. It is very important to merge and newly redefined IoT-sourced data with traditional data like customer and policy records. Data management strategy should provide a unified platform, tools, methodologies, and workflows for managing IoT data as a core asset. Data created through IoT helps to resolve the situation of cyber attack and fraud. The insurer should introduce new more applications for handling the faster claim settlement and protect from cyber-attack and fraud. The internet of Things technology will redefine the way of assessing risk and a wide range of potential implications in the insurance industry.

The main aim of the study is to examine the efficiency of the flow of data in the Indian insurance industry. The other dimensions variables which affect the IoT implementation and evaluation are such as building a strong relationship, keeping the customer updated, improving the service processes, predicting product failure, and advertising/sales promotion through IoT.

2. OBJECTIVE OF THE STUDY

The main objective of the study is to study the factors influencing IoT and customer experience for maintaining the customer engagement by the offered services of insurance companies in UP and NCR. The major objective is to study the customer experience through IoT in the insurance sector.

3. RESEARCH HYPOTHESIS

H1: There is a significant impact on factor influencing IoT and customer experience in the Insurance Sector.

4. RESEARCH METHODOLOGY

Research Methodology explores the platform of the methods applied to a field of study. A descriptive research has been used in this study and further, it also focuses on the validity and reliability of research as per the norms of standardization.

The questionnaire was administered through the mail and in-person to 385 respondents. The Researcher got a reply from 300 respondents (77.9%). All the respondents belonged to a balanced mix of demographic factors (Age, Sex, marital status, education level, income, employment status, Status of usage of the plan). The respondents belonged to twelve public and private insurance companies of major cities in Uttar Pradesh and NCR. The data was collected through the convenience sampling technique. Statements were used for customer engagement related to the previous literature review. The respondent was asked to rate each statement on the Linkert scale of 1 to 5 (1= strongly disagree, 2= disagree, 3= neutral, 4= agree, 5= strongly agree).

5. SAMPLE DEMOGRAPHIC PROFILE OF POPULATION

The sample size of the research is 300. Out of 300 population size of the sample, most of the respondents are belonged to NCR and west U.P., 90.7% are male and 9.3% are females. The marital status of respondents reflects that 82% are married and 18% are unmarried. The dimensions of the sample size are based on age, academic qualification, profession, annual income, and status of usage insurance plan that are shown respectively.

6. FOCUS AND SCOPE OF THE STUDY

The present study has been undertaken to study has analyzed the factors influencing IoTs and customer experience which impact on the customer engagement in the insurance sector. In addition, this study attempts to explore the factors which affect customer engagement in the insurance sector. This study is restricted to major cities and districts of west Uttar Pradesh and NCR.

7. ANALYSIS OF DATA AND INTERPRETATION

The main two basic tools are used to analyze the data that are SPSS 19 & Microsoft Excel. The statistics results were presented in tabular and graphical form. Data Interpretation is the implementation of the process through which data can be reviewed for the purpose of gaining an inference of research study. Chi-Square test was done to find the association between age and Profession with customer engagement in the Indian Insurance Industry.

Age-wise IoT and Customer Experience

Crosstabs

Case Processing Summary

	Valid Case		Case Missing		Total	
	N	%	N	%	N	%
IT1*AGE	300	100.0%	0	0.0%	300	100.0%
IT2*AGE	300	100.0%	0	0.0%	300	100.0%
IT3*AGE	300	100.0%	0	0.0%	300	100.0%
IT4*AGE	300	100.0%	0	0.0%	300	100.0%
IT5*AGE	300	100.0%	0	0.0%	300	100.0%
IT6*AGE	300	100.0%	0	0.0%	300	100.0%

IT1 * AGE

	Crosstab				
	15 Year - 30 Year	30 Year -45 Year	45 Year -60 Year	60 Year and Above	Total
IT1					
Strongly Disagree	1	5	0	0	6
Disagree	4	10	2	0	16
Neutral	6	16	4	0	26
Agree	40	48	28	5	121
Strongly Agree	46	62	20	3	131
Total	97	141	54	8	300

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	12.894 ^a	12	.377
Likelihood Ratio	14.803	12	.252
Linear-by-Linear Association	.229	1	.632
N of Valid Cases	300		

IT2 * AGE

	Crosstab				
	15 Year - 30 Year	30 Year -45 Year	45 Year -60 Year	60 Year and Above	Total
IT2					
Strongly Disagree	0	4	0	0	4
Disagree	2	7	1	0	10
Neutral	6	17	7	0	30
Agree	38	54	19	2	113
Strongly Agree	51	59	27	6	143
Total	97	141	54	8	300

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	13.322 ^a	12	.346
Likelihood Ratio	15.946	12	.194
Linear-by-Linear Association	.100	1	.751
N of Valid Cases	300		

IT3 * AGE

	Crosstab				
	15 Year - 30 Year	30 Year -45 Year	45 Year -60 Year	60 Year and Above	Total
IT3					
Strongly Disagree	0	7	3	0	10
Disagree	2	9	1	0	12
Neutral	9	15	6	0	30
Agree	42	51	20	3	116
Strongly Agree	44	59	24	5	132
Total	97	141	54	8	300

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	11.876 ^a	12	.456
Likelihood Ratio	16.170	12	.184
Linear-by-Linear Association	.531	1	.466
N of Valid Cases	300		

IT4 * AGE

IT4	Crosstab				Total
	15 Year - 30 Year	30 Year -45 Year	45 Year -60 Year	60 Year and Above	
Strongly Disagree	0	7	1	0	8
Disagree	0	6	0	0	6
Neutral	6	13	5	0	24
Agree	40	51	21	4	116
Strongly Agree	51	64	27	4	146
Total	97	141	54	8	300

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	15.199 ^a	12	.231
Likelihood Ratio	20.373	12	.060
Linear-by-Linear Association	.722	1	.395
N of Valid Cases	300		

IT5 * AGE

IT5	Crosstab				Total
	15 Year - 30 Year	30 Year -45 Year	45 Year -60 Year	60 Year and Above	
Strongly Disagree	0	8	0	0	8
Disagree	2	6	0	0	8
Neutral	9	17	6	0	32
Agree	51	48	31	4	134
Strongly Agree	35	62	17	4	118
Total	97	141	54	8	300

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	22.481 ^a	12	.032
Likelihood Ratio	27.955	12	.006
Linear-by-Linear Association	.009	1	.926
N of Valid Cases	300		

IT6 * AGE

IT6	Crosstab				Total
	15 Year - 30 Year	30 Year -45 Year	45 Year -60 Year	60 Year and Above	
Strongly Disagree	0	3	1	0	4
Disagree	0	4	2	0	6
Neutral	6	19	9	0	34
Agree	48	62	21	3	134
Strongly Agree	43	53	21	5	122
Total	97	141	54	8	300

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	13.298 ^a	12	.348
Likelihood Ratio	17.492	12	.132
Linear-by-Linear Association	2.158	1	.142
N of Valid Cases	300		

Age- wise IoT affect for customer engagement in the Insurance sector

H1: There is a significant impact on factor influencing IoT and customer experience in the Insurance Sector

S. No.	Dimension	H1	Calculated Value	Remarks
1	Improves flow of data	IoT increase and improves the flow of data about customer's behaviour is independent of age	.377	H1 Accepted
2	Building strong relationship	IoT enables building a strong relationship with customer by providing them specialised service is independent of age	.346	H1 Accepted
3	Keeping customer updated	IoT enables customer updated is independent of age	.456	H1 Accepted
4	Improving service process	IoT helps improving service is independent of age	.231	H1 Accepted
5	Predicting product failures	IoT enables product failure is independent of age	.032	H1 Rejected
6	Advertising and sales promotion through IoT	IoT increases the accuracy of advertising and sales promotions is independent of age	.348	H1 Accepted

Inference

From H1, it is inferred that customer engagement through IoT and customer experience is affected by such variables as predicting product failure is dependent on age. While the variables such as the flow of data, building strong relationships, keeping customer updates, service process, and advertising /sales promotion through IOT are independent of age. Adequate flow of data information enables the service process adequacy and more customer update through sales promotion from IoT. The whole process is helpful to engage more customers in the insurance industry and updating the channel services through technological advancement. Most of the older people are not aware of technological advancement and not able to compare insurance plans so that they are not able to predict any information

regarding product failure. IoTs affect the customer experience in the insurance industry and work as a catalyst to increase customer engagement in the insurance sector.

Profession -wise IoTs and customer experience

Crosstabs

Case Processing Summary

	Valid Case		Case Missing		Total	
	N	%	N	%	N	%
IT1*PROFESSION	300	100.0%	0	0.0%	300	100.0%
IT2* PROFESSION	300	100.0%	0	0.0%	300	100.0%
IT3* PROFESSION	300	100.0%	0	0.0%	300	100.0%
IT4* PROFESSION	300	100.0%	0	0.0%	300	100.0%
IT5* PROFESSION	300	100.0%	0	0.0%	300	100.0%
IT6* PROFESSION	300	100.0%	0	0.0%	300	100.0%

IT1 * PROFESSION

IT1	Crosstab				
	Govt. Employee	Private Employee	Business	Others	Total
Strongly Disagree	1	4	1	0	6
Disagree	5	8	3	0	16
Neutral	5	19	2	0	26
Agree	16	74	20	11	121
Strongly Agree	16	82	24	9	131
Total	43	187	50	20	300

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	10.875 ^a	12	.540
Likelihood Ratio	13.444	12	.338
Linear-by-Linear Association	4.051	1	.044
N of Valid Cases	300		

IT2 * PROFESSION

IT2	Crosstab				
	Govt. Employee	Private Employee	Business	Others	Total
Strongly Disagree	0	4	0	0	4
Disagree	1	8	0	1	10
Neutral	9	14	7	0	30
Agree	15	73	17	8	113
Strongly Agree	18	88	26	11	143
Total	43	187	50	20	300

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	15.131 ^a	12	.234
Likelihood Ratio	18.899	12	.091
Linear-by-Linear Association	2.381	1	.123
N of Valid Cases	300		

IT3 * PROFESSION

IT3	Crosstab				
	Govt. Employee	Private Employee	Business	Others	Total
Strongly Disagree	1	6	2	1	10
Disagree	2	6	4	0	12
Neutral	8	21	1	0	30
Agree	14	70	21	11	116
Strongly Agree	18	84	22	8	132
Total	43	187	50	20	300

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	14.344 ^a	12	.279
Likelihood Ratio	17.479	12	.132
Linear-by-Linear Association	.259	1	.611
N of Valid Cases	300		

IT4 * PROFESSION

IT4	Crosstab				
	Govt. Employee	Private Employee	Business	Others	Total
Strongly Disagree	0	3	4	1	8
Disagree	0	6	0	0	6
Neutral	9	13	2	0	24
Agree	14	74	20	8	116
Strongly Agree	20	91	24	11	146
Total	43	187	50	20	300

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	23.846 ^a	12	.021
Likelihood Ratio	24.271	12	.019
Linear-by-Linear Association	.017	1	.895
N of Valid Cases	300		

IT5 * PROFESSION

IT5	Crosstab				
	Govt. Employee	Private Employee	Business	Others	Total
Strongly Disagree	0	4	4	0	8
Disagree	3	4	1	0	8
Neutral	10	17	5	0	32
Agree	14	89	19	12	134
Strongly Agree	16	73	21	8	118
Total	43	187	50	20	300

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	23.461 ^a	12	.024
Likelihood Ratio	23.495	12	.024
Linear-by-Linear Association	.852	1	.356
N of Valid Cases	300		

IT6 * PROFESSION

IT6	Crosstab				
	Govt. Employee	Private Employee	Business	Others	Total
Strongly Disagree	0	3	0	1	4
Disagree	1	2	3	0	6
Neutral	9	20	3	2	34
Agree	12	88	23	11	134
Strongly Agree	21	74	21	6	122
Total	43	187	50	20	300

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	18.224 ^a	12	.109
Likelihood Ratio	17.732	12	.124
Linear-by-Linear Association	.324	1	.569
N of Valid Cases	300		

Profession- wise IoT affect for customer engagement in the Insurance sector

H1: There is a significant impact on factor influencing IoT and customer experience in the Insurance Sector

S. No.	Dimension	H1	Calculated Value	Remarks
1	Improves flow of data	IoT increase and improves the flow of data about customer's behaviour is independent of Profession	.540	H1 Accepted
2	Building strong relationship	IoT enables building a strong relationship with customer by providing them specialised service is independent of Profession	.234	H1 Accepted
3	Keeping customer updated	IoT enables customer updated is independent of Profession	.279	H1 Accepted
4	Improving service process	IoT helps improving service is independent of Profession	.021	H1 Rejected
5	Predicting product failures	IoT enables product failure is independent of Profession	.024	H1 Rejected
6	Advertising and sales promotion through IoT	IoT increases the accuracy of advertising and sales promotions is independent of Profession	.109	H1 Accepted

Inference

From H1, it is inferred that customer engagement through IoTs and customer experience is affected by such variables as improving service processes and predicting product failure are dependent on the profession. While the variables such as the flow of data, building strong relationships, keeping customer updates, and advertising /sales promotion through IOT are independent of the profession. IoT helps to improve the flow of data and able to maintain a strong relationship with its customers without discriminating against their profession. Further, it helps to update the customer database information to boost up customer engagement in the insurance sector. But improving the service process and predicting product failure depends on the profession because an expert in IT can easily find the gap in the service process and forecasting the product plan to maintain robust customer engagement in the insurance sector.

8. FINDINGS AND CONCLUSION

From the data analysis, it is inferred that IoTs and customer experience is affected by such variable as predicting product failure is dependent on age. While another variable like the flow of data, building strong relationships, keeping customer updates, service process, and advertent/sale promotion through IoTs is independent of age. Adequacy of the flow of data information makes more efficient services and updates the customer database. The entire process of IoTs is a catalyst for customer engagement in the insurance sector. Older age people are not aware of technological advancement and not able to compare insurance plans so that they are not able to predict any information regarding product failure. IoTs affect the customer experience entirely in the insurance sector and work as the main component to increase customer engagement in the insurance sector. IoTs provide accurate data information that is useful to both insurers and the insured for taking preventive action against the losses in the future. IoTs technology is dynamic and changing continuously, it has become a big challenge before the insurer to cope with it and design new products accordingly.

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PROBLEMS IN E-BANKING USERS IN ADDIS ABABA, ETHIOPIA

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ABSTRACT

The paper examines the problems in E-banking users in Addis Ababa, Ethiopia. E-banking can benefit customers by the provision of convenience to customers, easy transfer of funds with minimal chance of error. To provide efficient and effective services, banks presently use the machine, technology, workforce/human resources, and other materials as fundamental inputs to attain its programmed goals and objectives. Along with those resources, technology is one of the competitive advantages for the banking industry to ease deliverance of the proposed service, to make appropriate decisions, and utilize resources user friendly. The study used explanatory research primary data collected from 384 active e-banking users residing in the Addis Ababa City of Ethiopia using a self-administered survey questionnaire. Problems in e-banking users are measured by using mean score of Problems of public and private bank user concerning to ATM card holder, Mobile Banking Users and Internet Banking Users. The paper also highlights the overall mean score of comparative analysis of the public sector and private sector banks.

KEYWORDS

ATM, e-banking, technology, mobile banking, internet banking.

JEL CODE

G21, O10, O30.

1. INTRODUCTION

To provide efficient and effective services, banks presently use the machine, technology, workforce/human resources, and other materials as fundamental inputs to attain its programmed goals and objectives. Along with those resources, technology is one of the competitive advantages for the banking industry to ease deliverance of the proposed service, to make appropriate decisions, and utilize resources user friendly. However, in conventional banking, the client has to visit the branch of the bank in-person to perform the essential banking operations viz., cash withdrawal, fund transfer, and account inquiries. The brick and mortar structure of a bank is vital to carry out the banking functions.

In a developing country like Ethiopia, the growth of e-banking depends on several factors, for instance, level of internet penetration and telecommunication infrastructure, suitable legal and regulatory framework for e-commerce and e-payment, rates of literacy, power supply. E-banking provides faster and dependable services to the clients for which they may be more satisfying than that of a manual system of banking. E-banking method not only generates the latest doable return, but it can also get its improved dealings with clients. The E-Banking services encompass numerous products for instance Automated Teller Machine, Mobile banking, Point of sell, Internet Banking and Electronic Clearing Services.

2. REVIEW OF LITERATURE

W. Poon (2007) examined the determinants of users' adoption momentum of e-banking in Malaysia. A questionnaire with a Likert scale was employed to collect data from 324 usable responses. Ten attributes were tested, such as the convenience of usage, feature availability, accessibility, bank management, and image, privacy, security, design, speed, content, and fees and charges. The study found that the entire ten attributes are important concerning the users' adoption of e-banking services. Privacy and security are found to be the main sources of displeasure, which have seriously influenced users' satisfaction. Concurrently, content, convenience, accessibility, and design are the basis of satisfaction.

Gardachew (2010) examined research on the topic of opportunities and challenges of electronic banking in Ethiopia. The author accompanied a survey of the existing operating framework of banks and recognizes some challenges of implementing e-banking system, such as, absence of appropriate legal and governing frameworks for e-business and e-payments, political volatility in neighboring countries, high rates of illiteracy and lack of the financial networks that contact diverse banks.

Mohammad (2013) investigated the factors that affect the practice of mobile-banking in Bangladesh. The study implemented a quantitative method. During the progression of the research, a self-administered questionnaire was set to the customers of two full-fledged mobile-banking service suppliers of Bangladesh named Brac Bank Limited and Dutch Bangla Bank Limited. The result of the study showed that Variables for instance ability, benevolence, perceived usefulness, integrity, perceived ease of use relative cost, and time advantages were established to affect the implementation of mobile banking.

Mattewos (2016) investigated the challenges and prospects of e-banking in Ethiopia, principally; it focuses on matters like an assessment of the contemporary magnitude and practices, advantages grasped by banks, motivating forces, the prospects and challenges for the implementation of electronic banking provision in Ethiopia. The study implemented primary data sources by using self-administered questionnaires. For data processing, SPSS software is used. The findings of the study indicate that ATM, credit card and debit card services, internet banking, mobile banking, and other electronic payment systems are at an infant stage.

Abebe (2016) in his study conducted to investigate opportunities and challenges in the adoption of e-banking services for a private bank in Ethiopia using a combination of technology acceptance model (TAM) and technology-organization-environmental (TOE) with some modification to guide the research. The research finding shows that security risk, clients' awareness about the service, technical, managerial and execution ability of electronics banking, the continuation of service after a failure, capability upon failure, publicizing, giving awareness to the society, information, and communication technology infrastructures and low down of internet access as the main challenges in the adoption of electronic banking service in Dashed bank.

3. OBJECTIVES OF THE STUDY

1. To examine the problems in Automated Teller Machine, Mobile banking and Internet banking.
2. To make recommendations to deal with these challenges.

4. RESEARCH METHODOLOGY

The study used primary source of data. The primary data is collected with the help of structured questionnaires from a sample of 384 respondents of public and private sector bank customers of the Commercial bank of Ethiopia, Awash bank, and Dashed bank from Addis Ababa. The respondents are selected by using the purposive sampling method.

5. E-BANKING

Electronic banking can be defined as the delivery of banks' information and services by banks to users using different delivery platforms that can be used with various terminal devices, for example, a personal computer and a mobile phone with a browser or desktop software, telephone, or digital television.

PROBLEMS IN ELECTRONIC BANKING

Problems in ATMs

When clients required cash they want, and expect, the ATM to work as needed. ATM owners would be wise to conduct regular servicing and maintenance on their ATMs to avoid disappointed clients who cannot access their cash. Nevertheless, ATMs are machines and machines sometimes break. There are impending problems linked with ATM cards. ATM cards have suited a large part of everyday banking for many people. Owing to this, ATM cards present a quite high risk for fraud. This creates important to keep an eye on client transactions, put aside receipts, and inform the bank instantly if there are any suspicious transactions on the account.

Even if custody of client ATM card information safe is mainly client responsibility, generally banks will reimburse deceitful charges, some may charge a fee for requests made after a fixed period. The client should check the ATM balance as a minimum once a week.

Sometimes fake card readers have been placed over the genuine ATM. When a client uses the card through these machines, the information of the client is sent to somebody who can read it and might steal the card information. It is difficult to get these readers.

The majority of ATM problems will be recognized within 24 hours. Mainly banks maintain account updates in real-time. If the clientele has an online account, it is simple to ensure the balance of the card at any time. Responding to the problems might take longer. Though, most of them resolved within one month.

In Ethiopia, poor connectivity, frequently out of order of ATMs, not maintaining adequate cash, insufficient number of ATMs, Improper location of ATMs, security concern, Improper location of ATMs, restriction for use other banks, ATMs, high fees and charges are some of the major problems faced by the e-banking users.

To examine the difficulties faced by the e-banking service used in the study area, all the potential problems were made identified and asked the respondents to rank the causes in the order of their significance. The ranks given by the participants were enumerated by using the Garrett Ranking Technique (Garrett, 1969). The formula is as specified:

$$n$$

$$\text{Per cent position} = \sum_{j=1}^n [(R_{ij} - 0.5) / NJ] \times 100$$

Where,
 Rij = represents for rank given for the ith item by the jth individual, and
 NJ = represents a number of items ranked by the Jth individual.

Nature of ATM users' problem

The elements that contribute to the problem of ATM users are grouped into ten factors

- F1 = Insufficient number of ATMs
- F2 = Improper location of ATMs
- F3 = Not maintaining adequate cash
- F4 = Not maintaining denomination
- F5 = Security concern
- F6 = Poor connectivity
- F7 = High fees and charges
- F8 = Frequent out of order
- F9 = Restriction for use other banks
- F10 = Long waiting time

The difficulties faced by the users of ATM banking are discussed in the below Table.

TABLE 1: PROBLEMS OF PUBLIC BANK ATMS USER (N = 192)

Factor	Frequency of Problems faced by respondents (calculating the relative degree of importance of values, from 1 to 10, where 1 is the most frequent and 10 is the least one)										Mean Score	Rank
	1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th	9 th	10 th		
F1	5	16	31	37	36	29	20	12	5	0	53.70	IV
F2	0	8	36	44	32	23	24	19	7	0	52.31	VI
F3	10	21	48	53	39	13	6	1	1	0	59.15	III
F4	0	3	6	9	17	29	42	48	38	0	41.56	VIII
F5	0	1	15	14	24	32	47	38	21	0	44.59	VII
F6	74	52	35	16	8	4	2	0	0	0	70.48	I
F7	0	1	5	6	15	28	43	50	37	8	40	IX
F8	27	59	44	28	24	5	3	0	0	0	64.34	II
F9	0	0	2	2	17	22	39	53	26	36	36.20	X
F10	0	0	21	65	58	14	13	11	9	0	52.84	V

Source: Primary data

From table 1 it has been observed that the main problem faced by the public bank ATMs users in the study area is "poor connectivity" with a mean score of (70.48) followed by "frequent out of order" (64.34), "not maintaining adequate cash" (59.15) and "insufficient number of ATMs" (53.70) are the third and fourth problems. "Improper location of ATMs" (52.80) and "long waiting time" (52.31) is the fifth and sixth problem. The seventh, eighth, ninth and tenth problems are "security concern" (44.59), "not maintaining denomination" (41.56), "high fees and charges" (40) and "restriction for use other bank ATM" (36.20). It can be inferred from the table that all the respondents are highly dissatisfied with the poor connective of ATMs installed by the banks. However, it is noteworthy to mention that the respondents opined restriction for the use of another bank ATM is the last problem of the public bank ATMs users.

TABLE 2: PROBLEMS OF PRIVATE BANK ATMS USER (N = 192)

Factor	Frequency of Problems faced by respondents (calculating the relative degree of importance of values, from 1 to 10, where 1 is the most frequent and 10 is the least one)										Mean Score	Rank
	1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th	9 th	10 th		
F1	13	22	25	30	37	29	19	10	8	0	55.35	IV
F2	5	9	41	37	34	19	27	15	3	0	53.18	VI
F3	17	15	31	47	30	22	11	18	0	0	56.51	III
F4	0	8	3	11	12	15	26	58	52	10	39.58	X
F5	0	6	14	12	26	28	40	43	22	0	44.58	VIII
F6	25	37	35	10	9	12	7	30	19	0	54.14	V
F7	28	40	33	14	16	32	25	5	0	0	60.34	II
F8	38	53	40	24	20	8	10	0	0	0	65.53	I
F9	0	0	19	5	10	20	48	53	33	10	41.81	IX
F10	0	0	0	46	48	10	28	31	30	0	45.86	VII

Source: Primary data

Table 2 shows the rank of problems observed by a private bank ATM user regarding various indicators of the problems of ATM services. Depending on the mean score of the respondents was found to be the highest for "frequent out of order" (65.53) followed by "high fees and charges" (60.34), "not maintaining adequate cash" (56.51), "insufficient number of ATMs" (55.35), "poor connectivity" (54.14), "improper location of ATMs" (53.18), "long waiting time" (45.86), "security concern" (44.58), "restriction for use other banks" (41.81) and "not maintaining denomination" (39.58).

TABLE 3: COMPARATIVE ANALYSIS OF THE PUBLIC SECTOR AND PRIVATE SECTOR BANKS

Factors	Public Sector Mean score	Public Sector Rank	Private Sector Mean score	Private Sector Rank
F1	53.70	IV	55.35	IV
F2	52.31	VI	53.18	VI
F3	59.15	III	56.51	III
F4	41.56	VIII	39.58	X
F5	44.59	VII	44.58	VIII
F6	70.48	I	54.14	V
F7	40	IX	60.34	II
F8	64.34	II	65.53	I
F9	36.20	X	41.81	IX
F10	52.84	V	45.86	VII
Overall average Mean score	51.52		51.69	

Source: Primary data

Table 3 shows the mean scores regarding responses of the respondents about selected factors in the analysis. The highest score was obtained for public bank "poor connectivity" with a mean score of (70.48) followed by "frequently out of order" for a private bank and public bank with a mean score of (65.53) and (64.34) respectively. The lowest score was obtained for public sector bank "restriction for use other bank ATM" (36.20) followed by private bank "not maintaining denomination" (39.58) and "high fees and charges" (40).

The overall mean score describes, to some extent, the more significant mean score for the respondents of a private sector bank with 51.69 and 51.52 for public sector banks.

PROBLEMS IN MOBILE BANKING

With the quick progress of Internet technologies and the diffusion of mobile phones, mobile-banking has gained attention as a feasible option in conveying financial services. Mobile phones as electronic payment channels have prominent and widely used by customers. Mobile payment makes it fully realized the self-service concept of electronic payment channels.

The different factors that can affect usage of mobile banking in the country, including time-consuming, poor connectivity, difficult to operate, language problem, less it literacy, limited range of services. That these elements contribute to the problem of mobile-banking users are grouped into six factors.

F1 = Time Consuming

F2 = Poor connectivity

F3 = Difficult to operate

F4 = Language problem

F5 = Less IT literacy

F6 = Limited range of services

TABLE 4: PROBLEMS OF PUBLIC MOBILE-BANKING USERS (N= 192)

Factors	Frequency of Problems faced by respondents (calculating the relative degree of importance of values, from 1 to 6, where 1 is the most frequent and 6 is the least one)						Mean scores	Rank
	1 st	2 nd	3 rd	4 th	5 th	6 th		
F1	0	15	62	66	33	18	46.52	V
F2	0	23	62	76	21	10	48.33	IV
F3	14	47	67	42	24	0	54.44	III
F4	70	66	38	18	0	0	64.73	I
F5	32	64	53	43	0	0	59.04	II
F6	0	14	50	66	35	27	41.90	VI

Source: Primary data

Table 4 demonstrates the problems faced by public mobile-banking users in the study area. "Language problem" is the major problem of mobile-banking users with a mean score of (64.73) followed by "less IT literacy" with a mean score of (59.04), "difficult to operate mobile banking", "Poor connectivity", "time Consuming" and "limited range of services" with a mean score of (54.44), (48.33), (46.52) and (41.90) are the third, fourth, fifth and sixth problems of the public bank mobile-banking users in the study area.

TABLE 5: PROBLEMS OF PRIVATE MOBILE-BANKING USERS (N= 192)

Factor	Frequency of Problems faced by respondents (calculating the relative degree of importance of values, from 1 to 6, where 1 is the most frequent and 6 is the least one)						Mean Score	Rank
	1 st	2 nd	3 rd	4 th	5 th	6 th		
F1	0	14	64	66	28	19	45.93	V
F2	0	19	67	70	21	14	47.46	IV
F3	21	46	60	45	20	0	54.92	III
F4	60	60	47	24	0	0	62.72	I
F5	41	63	46	40	0	0	59.64	II
F6	0	19	53	54	46	19	44.98	VI

Source: Primary data

Table 5 indicates the problems faced by private mobile-banking users in the study area. Depending on the mean score the major problem of private mobile-banking users is "language problem" (62.72), followed by "less IT literacy" (59.64), "difficult to operate" (54.92), "Poor connectivity" (47.46), "time consuming" (45.93) and "limited range of services" (44.98).

TABLE 6: COMPARATIVE ANALYSIS OF THE PUBLIC SECTOR AND PRIVATE SECTOR BANKS

Factors	Public Sector Mean scores	Public Sector Rank	Private Sector Mean scores	Private Sector Rank
F1	46.52	V	45.93	V
F2	48.33	IV	47.46	IV
F3	54.44	III	54.92	III
F4	64.73	I	62.72	I
F5	59.04	II	59.64	II
F6	41.90	VI	44.98	VI
Overall mean score	52.49		52.61	

Source: Primary data

Table 6 demonstrates the mean scores regarding responses of the respondents about specific parameters for the analysis. Both sector bank respondents rank similarly to the six factors which affect the usage of mobile banking. It is showed in the table that the highest mean score (64.73) was obtained by public sector bank for "language problem" followed by the mean score of (62.72) by private sector bank for the same problem and mean score of (59.64) by private sector bank customers for "less IT literacy" and the lowest mean score of (41.90) and (44.98) was obtained by public and private sector bank for the statement "limited range of services" respectively followed by the mean score of (45.93) by private sector bank customers for "time consuming".

The overall mean score portrays that the more significant mean score for the respondents of the private sector bank with 52.61 and 52.49 for public sector banks.

INTERNET BANKING PROBLEMS

Currently, Banking is no more limited in going and visiting the bank in person for a range of purposes such as depositing and withdrawing money, demanding for account statement, stop a payment, etc. you can also maintain a track of your account transactions and balance every time. Nowadays getting passbooks updated to know the total account balance is a matter of past. Internet banking is the latest development that has further a new dimension to banking transactions by making it more suitable, which has reduced the long tiresome waiting-lines. However, there are some serious problems that the clients may encounter while banking using the Internet, because of that, many still prefer to go directly to the banks instead of using this facility.

The deficit of Internet banking even though there are many benefits of internet banking, there are also some drawbacks but this could be concerned about.

- Sympathetic usage of internet banking might be not easy for a beginner at the initial go.
- Dependency: it is not possible to utilize online-banking unless you have an internet connection;
- The safety of transactions is a significant matter.
- Password safety is an issue. The password should be changed and memorized after reception of the password; if not, your account may be distorted by somebody who obtains your password.
- Difficulty to exercise it when the bank's server is down.

The elements that contribute to the problem of mobile-banking users are grouped into six factors.

F1 = Time consuming

F2 = Poor connectivity

F3 = Difficult to operate

F4 = Language problem

F5 = Less IT literacy

F6 = Power failure

TABLE 7: PROBLEMS OF PUBLIC BANK INTERNET BANKING USER (N = 192)

Factors	Frequency of Problems faced by respondents (Calculating the relative degree of importance of values, from 1 to 6, where 1 is the most frequent and 6 is the least one)						Mean Score	Rank
	1 st	2 nd	3 rd	4 th	5 th	6 th		
F1	0	18	60	66	30	18	46.38	V
F2	33	70	50	40	0	0	59.85	II
F3	0	24	71	64	24	10	48.88	IV
F4	0	12	47	70	36	27	43.91	VI
F5	73	66	37	17	0	0	65.41	I
F6	18	45	68	44	18	0	55.03	III

Source: Primary data

Table 7 shows the problems of public bank internet banking users in the study area. "Less IT literacy" is the major problem of the internet banking users with a mean score of (65.41) followed by "poor connectivity" with a mean score of (59.85), "power failure", "difficult to operate", "time-consuming" and "language problem" with a mean score of (55.03), (48.88), (46.38), and (43.91) respectively are determined to be the third, fourth, fifth and sixth problems of the public bank internet banking customers in the study area. The study made known that poor connectivity, language problem, and less IT literacy are the major problems e-banking users' faces in the study area.

TABLE 8: PROBLEMS OF PRIVATE BANK INTERNET BANKING USER (N = 192)

Factor	Frequency of Problems faced by respondents (Calculating the relative degree of importance of values, from 1 to 6, where 1 is the most frequent and 6 is the least one)						Mean Score	Rank
	1 st	2 nd	3 rd	4 th	5 th	6 th		
F1	0	14	58	59	38	21	44.68	V
F2	61	60	39	32	0	0	62.79	I
F3	0	54	60	57	14	5	51.47	IV
F4	0	8	50	64	38	30	42.74	VI
F5	52	48	42	50	0	0	60.40	II
F6	14	40	60	55	20	0	52.54	III

Source: Primary data

Table 8 shows the problems of private sector bank internet banking users. Depending on the mean score given by respondents of private bank internet banking customers "poor connectivity" with a mean score of (62.79) is the major problem faced by private bank internet banking users followed by "less IT literacy" (60.40), "power failure" (52.50), "difficult to operate" (51.47), "time consuming" (44.68) and the lowest mean score given by the respondents for "language problem" (42.74).

TABLE 9: COMPARATIVE ANALYSIS OF THE PUBLIC SECTOR AND PRIVATE SECTOR BANKS

Factors	Public Sector Mean scores	Public Sector Rank	Private Sector Mean scores	Private Sector Rank
F1	46.38	V	44.68	V
F2	59.85	II	62.79	I
F3	48.88	IV	51.47	IV
F4	43.91	VI	42.74	VI
F5	65.41	I	60.40	II
F6	55.03	III	52.54	III
Overall mean score	53.24		52.44	

Source: Primary data

Table 9 demonstrates the mean scores vis-à-vis responses of the respondents about selected factors of problems for internet banking users to analyse. The highest score was obtained for a public sector bank in the statement "less IT literacy" with a mean score of (65.41), followed by "poor connectivity" for a private sector bank with a mean score of (62.79). The lowest score was obtained for private and public sector bank "language problem" (42.74) and (43.91) respectively. The overall mean score describes to some extent larger mean score for the respondents of a public sector bank with 53.24 and 52.44 for private sector banks.

6. RECOMMENDATION

Banks should solve the problem of poor connectivity by working with Ethio-telecom and Ethiopian electric power corporation because poor connectivity and power failures are one of the major problems faced by the users of ATM, mobile banking and internet banking.

Banks also have to solve problems that arise within the company such as not maintaining adequate cash, insufficient number of ATMs, improper location of ATMs, security concern, and not maintaining denomination.

Literacy is low in Ethiopia. Accordingly, banks ought to make strategies to provide continued public education programs to give awareness regarding the usage of e-banking facilities, for instance, appropriate care of ATM cards, how to conduct various online transactions without the physical appearance, and safeguarding online transaction.

Banks should customize in developing e-banking facility software in the local language and should use words and designations, which are commonly understood by the majority of people.

7. CONCLUSION

In Ethiopia, E-banking is in an embryonic stage. Undoubtedly Ethiopian banks are making genuine endeavours for the implementation of advanced technology and installation of e-banking channels however still masses are distrustful of the notion. Banks are making genuine endeavours to popularise the e-delivery provisions and products.

Even if there are many obstacles in the way of smooth functioning of E-banking in Ethiopia however at the same time E-banking has vivid future in Ethiopia. It is promising path for banking sector in Ethiopia to exploit its profits and to make customer more satisfied. So E-banking can never be ignored and merely those banks will survive in the future which will adjust as per technological advancements and clients' needs because future of the banks eventually stays in the hands of customers. They must be pleased at any cost.

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