

Covid-19 Impact on Digital Services of Banking Industry with Respect to Employee's Perception

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Abstract—Banking Industry of India is the important source for its economy. Banks adopted technology in rigorous way due to COVID-19 pandemic. Many studies have been conducted regarding the customer's expectation and behaviour towards digital services and adoption of digital services in COVID-19 pandemic. This quantitative study investigates the employee's perception towards 'digital' for banks in COVID-19 pandemic. The study was conducted by targeting public and private sector banks of North India and South India both. Semi-structured interview was conducted with 35 executives and managers of banks. Interview questions were designed in such pattern to investigate impact and usage of digital services on employees. Responses are examined with NVIVO-12 software. Various responses are clubbed into main themes based on adaptability, effectiveness, employee training, information technology structure and trust in digitalization of banks. The quantitative finding reveals that significant contribution has offered insight to banks about how technology has changed the working experience of employees in COVID-19 pandemic.

Keyword: Digital Services, Digitalization, Information technology structure, Adaptability.

1. INTRODUCTION

Technology is revolutionising at very fast pace. Over the past year, the pace of digital adoption soar across sectors with many industries transforming and thriving. At the same time, many others have stumbled and dissolves. Everyday there is technology advancement and it has significant advances in maintenance services also. The evolution of maintenance (Jain, Bhatti and

Singh, 2014) from reactive to preventative and then to proactive is an example of developing technologies. So, the digital delivery aspects and modes of fulfilment should be understood by businesses. Technology advancement is affecting the livelihood in every aspect as it has brought many new methods of electronic communication also. Indian Banking System has also adopted different channels for communication to their customers through technology. The use of electronic banking technology (e-banking) such as Automated Teller Machines (ATM), Telebanking, Home Banking and Internet Banking, UPI, e-rupi and digital wallets in the delivery of products (Abukhzam, M., and A. Lee. 2010) and services has increasingly become an essential aspects of contemporary banking systems (Molos, 1998). Adoption of digital services is considered as a means to improve efficiency and performance and service quality (Robinson, 2000). These digital services are offered to their customers on their internet-based computer, tablet or smartphone. Services like money deposit, withdrawals and transfer, checking saving account management, applying for financial products, loan management, bill pay and other account services can be availed through banking technology services. Technology is digitalizing at every level from front to back end of banks and customer's increase demand for digitalized services has given rise to technology advancement within financial institution with artificial intelligence (AI) as core digital transformation.

The current study aims at understanding the factors and drivers for adoption of technology and the concern faced by employees of bank during the pandemic, COVID-19, using qualitative research. The outcomes

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would help in preparing an instrument for the adoption of digital services by the employees, in turn, will allow them to develop managerial strategies that will increase its acceptance. This paper will help in understanding the new windows of opportunities or obstacles for catching up by the employees. The methodology, qualitative technique used in this research paper would aid in developing the model for the employees for the intention of acceptance of technology in the time of emergency such as COVID-19 pandemic.

This research article begins with the introduction, the next section is all about the literature review. Next, an in-depth primary, qualitative study of employee's perception and reaction to digital services is reported. Finally, conclusion and general implications for the findings are discussed. The last section deals with the limitations of the current study with suggestions for the future areas of research.

2. LITERATURE REVIEW

Banks are providing digital services to customers as it involves high level of process automation and web-based services and enabling APIs to enable cross institutional services to deliver banking products and provide transactions. Digital services are latest channel whose potential is explored by existing players and new entrant too. According to latest Google Survey, around 22% of Indian adults: an estimated 205 million population (Google Survey, 2021) have only digital bank account and number is constantly growing. Over the next 5- years data will be 1.5 times i.e., population of 397 million adults are expected to hold online only bank accounts.

The definition of digital services is emerged as

- BaaS- Banking as a Service
It allows third party as integration with banks.
- BaaP- Banking as a Platform
It provides platform for integrating core systems with software.
- Cloud- based infrastructure
It allows less reliance on IT staff.
- White Label Banking
It refers to co-branded credit cards (Google Wikipedia).

The whole process of technology acceptance is bound to be different with this new paradigm of ubiquitous digital services (Lyytine et al., 2004). The digital service may start digitally, but this does not mean that all interactions are limited to be digital (Williams, Chaterjee, & Rossi, 2008).

There are several literatures cited regarding the digital services specifically e banking (e.g., Daniel, 1999; Keyes, 1999; Pikkarainen et al., 2006; Nikola et al., 2002; Lassar et al., 2005; Roshan Lal, et al., 2012) agrees that it is a general term for banking for the delivery of products and services through technological channels like telephone, mobile phone and internet.

Roshan Lal, et al (2012) found that Indian Banks are making efforts for the adoption of digital services and installation of e- delivery channels but still massive mass is far away. Younger generation is beginning to see the convenience and accessibility of e- banking delivery channels.

K P Verma, et al (2017) showed that technology innovation has arisen competition between the public sector banks and private sector banks. The Indian Banks are making tremendous efforts for the adoption of technology but main concern is of risk and security too. Since, sometimes a touch or clicking a wrong button creates a mistake and consumers suffers a lot. So, banks are making efforts to popularize the e-banking services and products.

Ranjana (2018) revealed that consumers perceptions towards cashless transaction is positive. They agree with the Government initiative on the usefulness of cashless economy but one of the major concerns is cyber-crime and illegal access in India. Large number of populations is still below literacy rate especially in rural areas. So, Government should make more efforts on financial literacy campaign time to time to make population aware of digital services and its security features also.

M Somasundaram (2020) indicated that there is a significant difference between perception of customers towards digital payment and their demographic variable. Demographic factors like age group, gender, educational qualification, family type, occupation and monthly income have positive and influence on the rate of adoption of digital payment. The system should adopt appropriate measures to overcome under delay

and minimize risk associated with the transaction in its processes.

Mohammad Abu Khzam, et al (2010) concluded that there is clear need for understanding the factors affecting the staff attitude towards banking technologies. Bank staffs were happy to adopt and implement technological alternatives to traditional manual processes.

N Nayana, et al (2018) stated that employees of each bank perceive that there is no significant relationship between age factors and overall perceptions of digital services. For EDI (Electronic Data Interchange) more human interpretation is required. Employees perceive that due to daily data entry of all transactions the working hours are increased.

T Shukla (2016) stated that the management plays an important role in adaption of technology in organization (bank). All employees agreed that training, employee learning, management support and co-ordination demonstrate the positive effect towards technology adoption at work place. Acceptance of technology at workplace will improve the function of employees especially in the context of banks in India.

K M Siby (2021) concluded that during the time of COVID-19 pandemic irrespective of various demographic factors people tend to use digital payments methods. Deep mobile penetration and easy accessibility of the internet has played a significant role in the digital payment methods. Demographic factors and literacy rate had showed significant role in the adoption of this advanced technology of digital services.

3. RESEARCH METHODOLOGY

In this study, employee's perception of digital services of banks during pandemic (COVID-19) period is studied. A historic picture of the study has to be drawn, so our sample was planned to sought diversity among the respondents. Data on perception of employees collected through semi-structured face to face interview as questions were same to each interviewee and questions to be asked were planned in advance. Through, questions are open ended questions, it is difficult to establish uniformity across respondents (Mathers; J Fox; Hunn 2000). Purposive sampling (Patton 2002) was used to study. The respondents were selected to study the perception of bank's executives

from public and private sectors banks in India, working at different managerial position and hierarchical levels. Face to face interview was conducted between May 2022 to June 2022 to collect responses from the respondents.

4. SAMPLE SELECTION

The Indian Banking system consists of 12 public sector banks and 22 private sector banks. Sample Banks were selected as according to their market share and capitalization in the market. So, State Bank of India (SBI) and Punjab National Bank (PNB) were selected among public sector banks and ICICI and AXIS Banks were selected among private sector banks. 50 banks executive were selected as respondents. These respondents were working at different channels at bank. They possess the knowledge of ground reality as executives and had working experience of more than 7-8 years in Banking Industry. Out of 50 executives, 12 executives refused for interview without knowing the topic of the study. The interview was conducted in English Language. The interview questions comprised related to topic of our study, each interview started with general questions and followed by more focused questions to extract details. The interview conducted lasted 30-35 minutes each and were transcribed verbatim before being coded and analysed with NVIVO-9 software.

5. DATA COLLECTION AND ANALYSIS

Geographically, the study was conducted on each state of North India and South India, in- branch experience of executive was required to define the impact of COVID-19 pandemic. During the data collection, though it was very rush in branch although respondents interview willingness showed high response rate. Furthermore, the following topics were covered during interview to draw conclusion regarding research question.

Table 1: Main topic of interview

1. Technological powers in the industry.
2. Development of employees.
3. Implementation of Digital Services.

Data analysis was conducted on the basis of open-ended face to face interview. The analysis was done

by a Qualitative Data Analysis (QDA) software named NVivo, a computer software package produced by QSR International. Varieties of responses received during interviews were clubbed (Kaur, S.J., Ali, L., Hassan, M.K. et al, 2021) into five main themes based on these tasks (Bazeley, 2007) manage data, manage ideas, query data, modelling visually and reporting. Table 2 provides our model based on codes and themes categories.

6. FINDINGS

1. Adaptability

Customers and in-branch staffs both have learned the importance of technology. Customers are educated about online banking services channels with either self-service technology or specialised bank staff. Majority of the interviewee reported that

“During COVID-19, the technology has contributed the optimum by providing the continuity of the banking services through alternate delivery channels. Technology usage has reduced the dependency on the branch visit of the customers.”

One of the executives commented:

“The exception of work from home was provided to the Bank staffs, even for the branches also. Currently not extended due to the sensitivity and security concern.... Banking industry has adapted technology and COVID-19 changed the working experience of bank staff in such way”.

Another manager pointed that:

“It has reduced the dependency on the branch visit by the customers. Customers are happily accepted the other mode of channels.”

Another concerning issue bank executive brought that although technology is adapted but it has not contributed on the business side such as lending or recovering as the current processes prefer the onsite visits.

2. Effectiveness

The functioning of businesses of banking industry has been transformed by implication of IT. Technology has changed the way banking is done within the branches and this era of technology has offered a lot digital products and new services. During the world pandemic COVID-19, all services are impacted badly and

banking industry is affected largely as the technology has contributed in operations of banks effectively but still customers are not so educated when it comes to them to adapt it. One of the interviewees revealed that “Lack of resources at branch level has impacted the services largely. Since the branch timings were reduced such as 8 am to 12 pm or alternate working days. So, in this way services have been impacted but the efficiency in that duration was at satisfactory level.”

The effect of COVID-19 was that the limited services were provided related to the withdrawal and transfer of funds. The lending was deeply affected. The digital services wherein the human intervention from banking side was not required, took a sharp rise such as the online transaction via internet banking / UPI/ mobile banking etc.

Bank executives shared their views that

“Digital services were affected in positive and negative ways both. For example, the timing of operation did not affect the functioning of banks but the services such as ATM/ passbook update KIOSK did impact in negative way as it has dependency on the outsource agencies and bank employees the function. The number of hits at such KIOSK/ ATM’s were reduced or in case they malfunction, it could not be restored for many days.”

The only solution was to move towards a cashless economy.

3. Employee Training

Another important observation during interview with bank staffs was concerned about in-branch training of staffs. Due to heavy workload branch, executives found it hard to self-motivate during the pandemic COVID-19. It was hard to keep motivated and lack of motivation, the attitude of branch employees was matter of concern. One of the interviewees commented that:

“Certainly, the staff in branch required training in the various diversified application/ fields that they are expected to provide service in branch. In fact, this is currently one of the pain areas in today’s banking.”

Most of the bank employees revealed that

“Due to pandemic COVID-19, many new schemes were launched by the government but due to the lack of knowledge of application, the operation in

branch was affected and relationship between front desk employees and customers was tending in negative direction.”

A college confesses that

“The new schemes were advertised in newspaper or website but somehow corresponding the insights were not ensured to be delivered or provided to staff before, the same resulting in not adequate services. They are applications related to core banking, Government business, lead generation, digital services, international

banking etc, hence a measure of adequate training should be the first step taken by the management.”

Recently, few banks have taken some concrete steps in this regard by incorporating this as one of the parameters in the annual appraisal so that the responsibility lies at the both ends (employee and management). However, proper training for branch staff is necessary to develop a positive attitude towards technology and it will ease to use digital channels of banks to serve the purpose for both the parties.

Table 2: Coding criteria and theme identifications

Construct from Framework	Identified Themes	Description
Technological Powers	Adaptability	Interviewee believed that during COVID-19, the technology contributed the continuity of banking service through alternate delivery channel.
Impact on Services	Effectiveness	Majority of interviewee reported that since branch operation timing was reduced as 8 am -12 pm or alternate day working due to pandemic COVID-19, services efficiency was at satisfactory level and customers expectation met.
Development	Employee Training	Respondents believed that certainly the staff in-branch required training in various diversified fields or applications. During COVID-19, the leaders aimed to prepare team and encouraged to encounter the crisis of their skills by motivating every morning.
Responsiveness	IT structure	Majority of interviewee believed that banking will move a step forward in the area of digital toward automation. The scope of “Robotics Process Automation” would be very wide and accessible even to a normal or walk-in-customers in branch.
Digital Future	Trust in e- banking	Respondents reported that quality of services delivered during COVID-19 pandemic by branch staff helped in attaining customers’ adoption of online banking services or other digital services too.

4. IT – Structure

In the era of technology, technology has transformed the world. However, the adaption rate in the world is not good but countries are enabling technology in their services. COVID-19 pandemic affected the whole world’s operation and compelled to adapt it. In India, all banks offer digital services to their customers, the banking industry will move a step forward in the area of digital towards automation. Rather some of the banks have initiated in this direction by utilizing “Robotic Process Automation” wherein certain monotonous processes that are dealt by bank officials have been moved towards Robotic Automation.

Bank employees revealed that:

“The future of the scope of such automated process would be very wide and accessible even to a normal or walk-in-customer. Chatbots introduced by banks onto

their corporate website is another example of moving towards automation.”

Most of the employees commented that

“Artificial Intelligence is another aspect that could be used through Robotic Process in banking application to serve walk-in-customers may be at the help desk counter at the branch”.

5. Trust in e-banking

The world is shifting from analogue to digital is no exception. As the development is increasing in technology, the use of other digital platform has been increased too either it is social media or search engine. Internet usage has changed drastically and it was also because of COVID-19 pandemic. Internet was also mode of communication during pandemic and all types of business was solely depend upon the internet. Banks

technology was fully consumed by the customers, every transaction was by online platform.

Many respondents reported that

“Earlier the usage of digital services was very less but during these days most of the customers used Paytm, Gpay, UPI, Mobiwiki, Airtel Money, Ola Money, Internet Banking, Mobile Banking for the payments. Customer’s service was available at their pin point, it builds trust in using this technology.”

In terms of customers responses, most bank executive reported that

“Customers were satisfied and were willing to use electronic services, so customers had given positive feedback.”

7. DISCUSSION ON FINDINGS AND CONCLUSION

Information Technology or the digital services is itself a cyclic process, with each process/ services having a certain life span of 5 to 6 years. It’s the core model of an IT or digital service that works on a licence or service mode that comes with a cap time frame on as it facilitates the IT company to generate its revenue.

Corresponding the training and development is required for the particular IT module that helps to provide the services. With the upgradation or enhancement or change in the IT module with time, the knowledge gap upgradation of the resources is required. In order to effectively provide the services through the digital media; it’s not only the IT product that is required but also its effective training for the employees so that it may be passed on to the customers.

Sometimes, Banks do need to inform their customers directly publicity media about the features of the new IT product along their certain disclaimer about the pre requisite that are required at customers end to enable them to reflex the benefits of the new product.

The knowledge gap could be the major issue in digitalization. The gap has been filled towards the branches, in order to provide better service to customers and more specifically towards customers too, so that they do not fall prey to any suspicious or fraudulent activity. One of the key inherent facilitations by digitalization is to transfer a certain factor of risks

towards the customers instead of banks. In case a customer mistakenly does an online transaction that may be credited in wrong account or may later found out to be a fraudulent transaction, the primary onus is on the customer (provided there is no digital glitches in Bank’s system) hence the “Risk Transfer” or risk mutilation also lies in digitalization.

With the technology also comes the concerns related to information and cyber security, an area which is untrapped to a large population in India. Hence, the focus is not only digitalization rather a secure mechanism of digitalization. There are still large population who still use feature phones, providing digital services to those strata of population requires to overcome.

8. IMPLICATION

This study adds the several implications for practice. The instrument provided the key challenges in the successful implication of digital services in the developing world. For example, employees are needed to be motivated and trained to resolve the queries of customers and stakeholders. The findings from the study are significant in bringing to light the insights into the extent of digital services effected the working and attitude perspective of employees. This study also highlights that during the crisis, how managers connected to their employees and strategically ensure uninterrupted delivery of services. The findings also indicate that how pandemic has strongly affected the mindset of management and employees both and there is a significant scope for human resource department to frame policies related to training programs and change management programs for their employees.

9. LIMITATION AND FUTURE RESEARCH DIRECTION

The study suffers from a major limitation, namely small sample size due to the pandemic COVID-19. The study explored the effect of COVID-19 focusing on employee’s perspective. However, the participants are from heterogenous group of banking industry, which ensured extensive data but in addition, the research was conducted during pandemic. Further studies could be conducted covering a large number of employees of banking industry by adding more states of India.

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