An Analysis of Consumer Expectations, Nature and Economic Implications of Smart Banking System in India

Priyanka Sahu, Chimaroke Jonathan Elezue, and Raghavendra Kushawaha

1 Introduction

"Internet banking is convenient for me" is an expression people or customers sometimes use when expressing satisfaction with the way their financial transactions were conducted. Usually this expression is uttered almost admiringly and with a nod of approval in recognition of the technology innovation put to use in achieving successful financial transactions. In this, twenty-first-century smart banking is widely accepted because of the convenience that it offered. Years back before the introduction of smart banking, long queues with hundreds of customers milling around banking premises, struggling to gain entrance, are a situation that no one looks forward to. Digital evolution has actually provided an opportunity whereby there is virtually an app for almost everything including sealing a financial transaction in any part of the world from the comfort of our home. The lockdown imposed as a result of the outbreak of the COVID-19 pandemic did not really alter or change the spending or banking habits of a smart banking user as every single banking activity they desired was carried out. In addition, the health risk that goes with the push and shove in or around bank premises is avoided or visibly minimized. Amid these numerous benefits that smart banking users enjoy, there is increasing concern, however, over increasing cases of accessibility as a result of poor Internet network coverage and also the insensitivity of financial institutions who exploit their

P. Sahu (✉)
Department of Humanities and Social Science, Ghani Khan Choudhury Institute of Engineering and Technology, Narayanpur, West Bengal, India

C. J. Elezue
National Open University, Lagos, Nigeria

R. Kushawaha
School of Economics University of Hyderabad, Hyderabad, Telangana, India

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customers by passing the cost of banking to them in the form of unreasonable charges. This chapter seeks to address the challenges associated with smart banking and helps to bring clarity to those who are not yet convinced to explore the numerous benefits attached. Smart banking currently faces significant challenges with customer expectations continually shifting. It is an established fact that customers take their businesses to banks that have demonstrated that they can meet their expectations, but at the same time, they are also uncomfortable doing business with any bank that has no physical presence or structures on the ground.

The aim of this chapter is to analyze the role of customer expectations in determining how smart banking penetrates in the financial industry. The specific objectives are to discover the impact of smart banking on its users in the banking industry, examine the relationship between customers/devices and the quality of service offered by financial institutions, and evaluate financial transactions security.

This chapter consists of six sections. The introduction and objectives of this chapter are discussed in Sect. 1 followed by literature review in Sect. 2. Section 3 focuses on the advantages and disadvantages of smart banking from both customers and stakeholder's perspectives. Sections 4 and 5 discuss the findings of the online survey and conclusion of the study.

2 Literature Review

The invention and evolution of smart banking have enhanced businesses, enabling business owners and customers to conveniently undertake financial proceedings or dealings, thereby ensuring an efficient use of time and cost. Smart banking was introduced by banks as an additional medium aimed at improving the efficiency of banking transactions, thus providing a convenient and easily accessible service to their customers. The major objective is to heighten customers' engagement that will in turn boost customer retention. Results from an Internet banking survey revealed that the percentage of European Union nationals exploring e-banking services increased between 2009 and 2019. It is predicted that more and more customers will adopt the Internet banking platform with figures projected to exceed 3.6 billion by 2024. Further reports also claim that e-banking customers in Norway, Denmark, and major developed nations form a sizable amount of users of e-banking services across the world.

Like every other business, the banking sector all over the world and in India in particular witnessed a change that enhanced its productivity due to the introduction of Internet banking. The economic liberalization in India widely contributed to the socioeconomic changes witnessed in the banking sector. The financial industry in India is projected to rank fifth in the list of top financial industry rankings in the world by 2020, and it is expected to expand further to hit the third ranking by 2025 according to the KPMG-CII report. A study carried out by Bhelly and Sunil [3] revealed that a committee set up by the Reserve Bank of India to do a research on Internet banking and to make recommendations based on their findings split

e-banking products in India into three types, namely, the information-only system, the electronic information transfer system that is a subsystem of equipment used in the creation and duplication of data and furnishes customers with a particular information like their accurate account balances and statement, and, finally, the fully electronic transactional system that was designed to aid in processing credit card payments and has the ability to function in two directions (usually opposite).

The modern world's increasing preference for online technology has sparked off intense competition among firms seeking to offer services that will be convenient for their customers. The banking industry evolved from an industry that functions and thrives on a thoroughly physical affair into one that is technology oriented. Smart banking ensures that users are able to conduct their transactions automatically and technologically through the use of Internet, thus avoiding the rigor of being physically present at the bank premises. Some of the smart banks are originally traditional banks that conduct financial transactions through the use of Internet, while others are purely smart banks with no physical presence at all. Technological advancement in the finance sector has resulted in the increase of financial products and services introduced by banks, thus ensuring that they meet the business needs and demands of their customers. Studies has been conducted on the expectations of users of smart banking in India over the years. However, only few focused on the economic implications of adopting smart banking. Most studies about customers' or users' comprehension or satisfaction toward the adoption of smart banking system in India and the world at large are based on questionnaires that focus and analyze a particular country or region. A study by Hammond et al. [6] examined the effect of e-banking service quality on customers' satisfaction in the Lebanese banking industry. The author gathered data by distributing about 280 samples of questionnaire among bank customers. Their findings revealed that reliability, efficiency, responsiveness, and communication all have a notable effect on customers' satisfaction, with reliability being the most influential factor. A similar study by Shin Ho and Yahya [7] investigated the impression of consumers on how e-banking has been explored and used so far in Malaysia with critical focus on how Internet accessibility, Internet quality, security and privacy, transaction benefit, and trust influences consumer's willingness to adapt, adopt, and engage in Internet banking services. Their findings revealed that the abovementioned variables have a noteworthy impact on the extent at which e-banking is being used stressing the fact that banks need to contemplate offering a wide range of e-banking products and services that can restore full confidence to its users. A similar study carried out by Zavarech et al. [14] revealed that a significant positive relationship exists between e-Service Quality (e-SQ) and e-Customer Satisfaction (e-CS) in Internet banking indicating that efficient and reliable services, fulfillment, security/trust, responsiveness, etc., all constitute e-SQ, which in turn influences e-CS positively. There are differing opinions on whether the demographic features of clients can influence the extent to which e-banking is adopted. While some researchers view demographic characteristics as a significant factor that can influence the adoption of Internet banking, other researchers differ on this claim. Some researchers, however, believe that not all demographic variables can influence the adoption rates of Internet banking. To

understand the impact of demographic variables on smart banking system, a study carried out by Izogo et al. [8] examined the impact of six demographic variables, namely, gender, marital status, religion, income, age, and education level, on the adoption of Internet banking in Nigeria and revealed that while the influence of marital status, age, and education level on the adoption of Internet banking is significant, the reverse is the case with such demographic variables such as gender, religion, and income. To understand the impact of customers' expectations toward smart banking system in India, a study was conducted by Khare et al. [10] to investigate the attitudes of Indian bank customers toward Internet banking with results revealing that convenience and trust are the most influential factors that can easily have an impact at the rate at which Internet banking is embraced. Correspondingly, Goudarzi et al. [5] concluded that a positive relationship exists between trust and e-banking noting that trust has a major impact that determines the rate at which e-banking is adopted. Their research was based on the analysis and review of data on the subject, but a large part of the research was carried out in the context of smart banking. Their findings show that there are many components associated with trust in electronic services with discoveries that online trust is a crucial issue for customer retention in terms of Internet banking services. Almohaimeed [1] agreed with other existing studies that there are notable differences between users and non-users of e-banking, asserting that both classes of Internet banking are influenced by various elements. It was discovered that Internet banking users are more likely to be male who are in their prime and are technology driven with a need for convenience while non-users tend to be either younger or older and not open to change or innovation. Further discoveries revealed that educated customers tend to be more open to the idea of engaging in e-banking services because they are likely to be conversant with the use of computer and the Internet. Jayaram and Prasad [9] investigated if there is any association between the adoption of Internet banking and the bank's performance and risks with their findings revealing that there is no significant association between the adoption of Internet banking by banks and their performance. Suriyamurth and Karthik [13] carried out a research to prove the accuracy of the theoretical or philosophical way of the operation of e-banking. Their study revealed that education, gender, and income play a vital part that determines how Internet banking is used. In conclusion, their research supported the theoretical structure that states that there will be greater conviction by consumers to use Internet banking if their skills are upgraded. Ramanigopal et al. [11] in their assertion also affirmed that customer literacy level is a major influential factor that determines how Internet banking facility is accessed, pointing out further that factors such as transaction updating, account transfer, security, and easy access all contribute to the high level of satisfaction that users enjoy. They concluded by positing that attitude, commitment, and involvement of banks in addition to evolving technology determine the level of success that electronic banking will be able to attain which will in turn translates to how far the customers will reap the benefits. Smart banking (Internet banking and mobile banking) marked a major breakthrough in banking services, as banks understood that clients require a convenient and secure way to handle their funds, which can only be provided through smart banking. An empirical study

carried out by Sohail and Shaikh [12] to examine the service quality of electronic banking services provided by financial institutions in Saudi Arabia revealed that there are components that have an impact on user's assessment of the service quality of Internet banking services. These factors are identified as efficiency and security, fulfillment, and responsiveness. Their findings will ensure that bank's management team has a better grasp of customer's awareness of the service quality of Internet banking while also providing a framework for banks to improve service quality. A study by Gerrard et al. [4] examined why consumers are resistant to using e-banking. The findings revealed that factors responsible include but not limited to perceptions about risk, lacking knowledge, inertia, human touch, inaccessibility, and research limitations/implications among others.

3 Advantages and Disadvantages of Smart Banking

3.1 From Stakeholder's Perspective

Cost savings and improving transaction efficiency have been identified as the main benefits that banks enjoy from Internet banking. Reducing the dependence on manual operation and physical structures enables banks to save cost. Aydin [2] posited that Internet banking enables banks to reap benefits especially in the area of cost reduction by allowing banks to reduce customer service staff, thereby providing a channel that enables banks to enjoy advantages such as retention of customers, reduction of density in bank branches, faster response to market demand, reduction of banking operation cost, provision of more effective customer service, strengthening the bank brand image, development of new products and services, ability to advertise and sell financial products and services via their website, increasing customer loyalty, acquisition of new customers, and increase of sales. Aydin [2] listed the benefits of e-banking from customers' perspectives: the cost of physical branch banking is reduced, the use of traditional branch banking is minimized, there is raised attainability and time-saving processing can be made round the clock, and bank customers can access and conduct financial transactions at any time without delays from the comfort of their homes, offices, or anywhere as a result of Internet banking that runs 24 h a day every single day. The cost of conducting financial transactions via Internet banking is relatively lower as bank customers save money that would have been spent travelling to and from physical banking locations. His study also pointed out some of the disadvantages:

Transactional Risk This is the present and potential risk to earnings and capital arising from fraud, error, etc. This risk may exist with Internet banking products especially if the lines of business are not sufficiently planned and executed.

Reputation Risk Reputation risk is the present and potential impact on earnings and capital arising from negative public opinion. A bank's esteem can be destroyed

by e-banking services that are poorly executed. Engaging in marketing is one way to properly sensitize potential customers and help limit reputational risks.

Strategic Risk This is the present and potential risk to earnings and capital arising from adverse business decisions, inadequate execution of decisions, or lack of adaptability to industry changes. Banks must understand the risk associated with Internet banking before taking any decisive steps to develop a particular product.

Credit Risk This is the risk to earnings and capital arising from obligor's inability to meet the terms of any obligation with the bank.

Liquidity Risk Liquidity risk includes the failure to manage unplanned changes in funding sources. Increasing the flow of money and changes in deposits and loans may not be necessary depending on the volume of Internet account activities.

Foreign Exchange Risk This is present when a loan is financed by borrowings in another currency.

Price Risk This is the risk to earnings or capital arising from changes in the value of traded portfolios of financial instruments. Banks may be vulnerable to price risks if they create or expand loan sales as a result of e-banking activities.

Interest Rate Risk This is the risk to earnings and capital arising from the fluctuating interest rate.

3.2 From Customer's Perspectives

The existing disadvantages that users of Internet banking must keep in mind to avoid potential issues that could arise according to include the following:

Technology and Service Interruptions Temporary moments of instability are a scenario that every user of the Internet and Internet banking must experience. The ability to access accounts online will naturally be affected if your Internet service is running slowly or completely out for a period.

Security and Identity Theft Concerns Though banks continually put security protocols in place, accounts can still be hacked, resulting in identity theft via stolen login credentials. Users must be careful to avoid using networks that are not secure while accessing online banking.

Limitations on Deposits Business owners might find it difficult to make large deposits online as a result of limitations on deposits.

Lack of Personal Banker If a user does not have a personal relationship with a banker, it may be difficult to resolve concerns that emerge. So, even if a user handles their general banking needs on their own, they still require the assistance and counsel of a personal banker on spending.

A Limited Scope of Services There is a limit to the kind of service that a user can access though he/she can do quite a lot with an online bank account, such as making deposits, checking balances, and paying bills. Signing of forms, for example, and showing of identity documentation will still require a user to visit a bank branch.

4 Finding and Discussions

A well-structured scheduled questionnaire is intended to collect data from 74 respondents residing across India in both rural and urban areas. The aim of the online questionnaire was to understand consumer knowledge of the digital payment mode adoption and how smart banking is economically convenient and accessible to its users. Out of the 74 respondents, 48 were males and 26 were females. It is very clear that digitalization of India's banking system favors changing consumer behavior. The demographic dividend in India is well suited to push the Indian banking system toward digital conduct, with Indians with a median age of 27 years favoring maximum digitalization of the Indian banking system. However, smart banking connectivity is being properly introduced in urban areas, including metro cities and towns, and increased usage of smartphones and mobiles is likely to drive toward inclusive growth in the financial sectors, with mobile penetration of around 90% among young people and adults. Instead of waiting in long lines to make use of banking, digital payment strategies have become more casual and accessible among young people. Smartphones provide low-cost tools to expand the reach of banking and payments.

Digital payment methods, however, including Unified Payments Interface (UPI), Bharat Interface for Money (BHIM), Paytm (Pay through Mobile), and Net Banking, are very popular among young people and adults in both rural and urban areas. The usage and accessibility of the online payment mode are more observed among young people and adults from the age group of 15–30 years in both rural and urban areas during the lockdown period in India. However, when discussed with the respondents from the age group of 60–69 years, it has been observed that they are not much aware of the digital mode of payment. The reason would be lack of technical knowledge of payment, but a curiosity of learning the digital payment was observed among them.

From a gender perspective, the study also examined the availability and usability of smart banking. The survey reveals that female respondents are willing to learn how to incorporate new payment technology into the Indian banking system. As females are more mindful of their financial transactions, a sense of vulnerability was noted during their transaction. Female respondents in urban areas, however, are

aware of and make regular use of the digital mode of payment. For them, using online payment methods made their household activities easier during the lockdown period in India, but a few of them were unaware of the digital payment mode when questioned personally through telephonic conversations. Thus, it is likely observed from our survey that still the accessibility and awareness of smart banking are lacking among females in rural areas of India. Though, on a general consideration, females are very keen to learn new technologies, it is observed that a proper channel of guidance and training is required.

In addition, it was also noticed during the survey that the main motivating force for allowing customers to use Internet banking was found to be customer convenience. The key reason for the lack of response towards e-banking, is a lack of computer literacy. Furthermore, our studies revealed that there is a group of customers that believe online banking is not not safe. They also claimed that private banks were influential in offering better facilities for e-banking than India's public banks.

5 Conclusion

India was known to have practiced a cash-intensive economy where every transaction and payments were made with cash, but the introduction of smart banking reversed that trend as more people adopted e-banking for their business transactions. Banking services recorded a major breakthrough with the introduction of smart banking as banks recognized the customer's preference for a convenient and secure way to conduct financial transactions. The factors that determine adaptability and the rate of adoption of smart banking in India were investigated in this study, with the results identifying convenience, age, and location as factors that influence the rate of adoption of smart banking in India.

Results from this study further revealed that the usage and accessibility of e-banking are more noticeable among young people and adults from the age group of 15–30 years in both rural and urban areas. Further discoveries further proved that educated customers are more willing to adopt and adapt to digital payment mode as a result of their being computer literate. This study was also designed to analyze the factors that influence customer's perception to the adoption and use of e-banking as well as the economic implication of adopting the digital mode of payment. It has been observed that the adoption of smart banking affords banks the opportunity to reap tremendous benefits especially in the area of cost reduction and transaction efficiency by reducing the dependence on manual operations. Convenience is the major motivating factor for customers to adopt smart banking, so banks should embark on a drive that exhibits convenience as a way of attracting and retaining customers. Financial stability, which is critical to any sustainable banking innovation, is a major concern of any major financial institution, and it is yet to be seen how new technologies like smart banking can mitigate any evolving financial crisis.

The ability of smart banking to conduct a faster transaction, saving time in the process, increases the speed of money which will in turn open new areas for scrutiny and regulation in the monetary system. This process will ensure financial stability and ultimately a robust economy.

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