

# An Analytical study of Indian Internet Banking: With special reference to users' satisfaction

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## INTRODUCTION

In the past, banks have been at the vanguard of utilizing technology to improve their services, products, and productivity. They have been passing over a wide variety of expensive goods and services for a very long-time using computer and telecommunication networks. Direct dial-up connections, private networks, public networks, and many others are examples of shipment routes. Devices include telephones, personal computers that include automated teller machines, etc. With the popularity of Computers, easy access to the Internet, and World Wide Web (WWW), banks are using the Internet more frequently to receive orders and deliver goods and services to their clients.

Although the variety of products and services provided by distinctive banks vary greatly in their substance and sophistication, this type of banking is frequently referred to as Internet Banking.

1. The most significant services that a bank offers to its service buyers or customers are through its websites, which contain the dissemination of information and procedures on a variety of products and services that are provided by banks and that can be accessed by its customers and the general public who may not be its customers. These websites also allow for the receipt of customer questions and the subsequent response to the same.
2. Another type of service offered to members relates to simple transactional websites, which let users make requests, applications for various online services, inquiries about their account amounts, etc., but do not let users conduct any fund-based transactions on their accounts.
3. A successful fully transactional website that enables members and customers to manage their accounts for the transfer of funds, payment of various bills, subscription to various bank

products, and assistance in transactions relating to the trading of securities is an additional type of Internet-based banking service.

The services mentioned above which now are provided through the internet banking platforms are also provided by traditional banks in their traditional ways, it is only an innovative way to increase the variety of the areas covered by a bank offline, along with increasing the efficiency & effectiveness in providing banking services without being restricted and consumed by the geographical boundaries of the banks area of location.

## REVIEW OF LITERATURE

### 1. International Reviews

(Jane M. Kolodinsky, 2004) This research looks at how three E-banking technologies are adopted or planned to be adopted, as well as how these variables have changed over time. The study finds that relative advantage, complexity/simplicity, compatibility, observability, risk tolerance, and product involvement are all associated with uptake using data gathering commissioned by the Federal Reserve Board. Factors like salary, assets, schooling, gender, marital situation, and age all have an impact on adoption. While adoption has evolved over time, other variables' effects on adoption have not. Both the effects on public policy and the financial industry are addressed.

(Emad Hashiem Abualsauod, 2020) By comprehending the interactions of key players in the banking sector, this study seeks to conceptualize OB (online banking) and find OB quality gaps based on pertinent literature. Three stages of consumer involvement with online banking platforms and five quality gaps in online banking were discovered. Therefore, the final objective of this research is to evaluate the effects of such quality variations on Saudi Arabian consumers' willingness to use OB as well as their satisfaction with OB. Technology and

interpersonal shortcomings were found to have a significant effect on customers' capacity to use OB.

## 2. National Reviews

(Vikas Chauhan and Vipin Choudhary, 2015) talks about the challenges and opportunities of internet banking in the Indian market. The research concludes that the idea of online banking is getting ground steadily. Government agencies are trying to raise its appeal among consumers as it becomes more well-known in the Indian context. The adoption of E-Banking services is being held back by issues like Security risks, privacy worries, mistrust, and a general dearth of customer understanding about E-Banking. (D, A Consumer Knowledge Survey of e-Banking, 2016) The research examines how consumers interact with the electronic banking infrastructure. The survey's results indicate that customers are optimistic. Lack of knowledge of banking procedures is the main obstacle to using the E-Banking service. A few respondents think that using E-Banking is risky, and most concur that the systems are too complicated to use. Primary facts for analysis are the foundation of this work. Most bank customers are conscious of all banking options, the study's results indicate. Additionally, banks must take the necessary actions to educate their clients about new tools and other services they offer.

### Statement of problem

In-depth examination and analysis of customer happiness with E-Banking services are the main goals of the study. This study aims to assess and comprehend the reasons why people choose online banking, consumer satisfaction with E-Banking services, and customer problems. This study helps determine how frequently customers use current e-banking services. An individually administered questionnaire was given to the citizens of Pune city in order to collect the raw data for this study.

### Significance of the E- Banking

Our busy lifestyles make every day a race against the clock, so we try to find every opportunity to save time. One of the technological developments that aids consumers is e-banking. conduct their financial transactions from a retail or automated bank, credit union, or other financial institution on a secure platform. The digital distribution of new banking

services and products to consumers directly through electronic, interactive contact networks is known as e-banking, or simply electronic banking. Contrary to traditional banking, it provides clients with a few benefits and advantages.

E-banking is an easy and practical method to get smartphone access to your bank around-the-clock. E-banking uses the internet as a means of distributing financial transactions. When it comes to running daily tasks, bank transfers are a thing of the past thanks to e-banking services. One of the most well-liked services offered by banks is internet banking, which makes it a very reliable platform. Banks frequently employ encryption systems to guarantee the security of all client data and the absence of data breaches. In the end, it shields you from online scams and account manipulation.

### Scope and limitation of the E- Banking

In this study, the focus is on E-Banking and the factors that affect E-Banking users in Pune as well as the level of customer satisfaction with these services. It also allows everyone to see how many new banking services are used by consumers. The research goes on to say that modern facilities help to build a stronger relationship with consumers. Customers nowadays want banking services to be available 24 hours a day, seven days a week. Because of the extensive use of internet technologies, the entire banking system has changed in the current era. E-Banking has given all customers the ability to operate across borders. E-Banking is an electronic payment system that allows a bank or financial institution's customers to perform financial and non-financial transactions over the internet. Customers can use this service to access almost every banking service that was formerly only accessible at a local branch, such as fund transfers, withdrawals, and online bill payments. It is a system designed for online banking that helps customers to reach bank accounts easily and safely.

### OBJECTIVE OF RESEARCH

- 1.To study the relationship between security towards the satisfaction level of customers using E-Banking services of Bhopal city.
- 2.To study the relationship between convenience and satisfaction level of the E-Banking customer of Bhopal city.

3. To study the effect of E-Banking on quality services and customer satisfaction.

Hypothesis

H01: There is no significant relationship between security measurement towards the satisfaction level of the E-Banking customer.

H02: There is no significant relationship between Convenience measurement towards the satisfaction level of the E-Banking customer.

## RESEARCH METHODOLOGY

### 1. Sample Design

The study's subjects were chosen using a multi-stage sampling method. In four phases, clients from Indian Bank, ADU Campus, and Coimbatore were chosen. There are approximately 1647 Indian Bank branches throughout the country, of which 710 are located in Tamil Nadu and 37 in Coimbatore. Of the 37 Indian Bank branches in Coimbatore, only ADU Campus (Avinashilingam Institute for Home Science and Higher Education for Women) was specifically chosen for the study. Sample Size - For the current research, a sample size of 50 consumers was used.

### 2. Type of Study and Data

The character of the current research is analytical and exploratory. As a result, both main and secondary statistics are used. The supplementary sources for the current research are the pertinent reports, including the RBI monthly bulletins, magazines, newspapers, business dailies, books and journals, e-media, and other writings in this area. With the aid of a structured questionnaire, the understanding of, impression of, and satisfaction with Online banking security is investigated. The original data was gathered from 50 Internet banking users in Maharashtra, Pune region using a different pre-tested questionnaire. The ADUC Branch in Coimbatore was used to pick Internet banking customers.

### 3. Statistical Tools and Techniques

A variety of statistical methods and tools, including averages, frequency distribution charts, and normal distribution, were used to evaluate the gathered data. The research also makes use of additional appropriate statistical methods, such as factor analysis, correlation and regression, mean, median, standard deviation with coefficient of variation, etc. The IBM - AMOS 20.0

version software and the SPSS software program were both used for the study.

Sources of data collection

Primary Data

The questionnaire asked about demographics, personal information such as name, gender, age, education level, employment status, annual income, place of residence, preferences for using banking services, and satisfaction with e-banking services. These questions were divided into five main categories: convenience, privacy, cost, security, and ease of use. It served as a means of gathering data by asking the sample's view. The information was then collected and examined using a tabular presentation, along with associated tests and graphic representations. A quantitative survey has the advantages of being flexible, allowing for numerous questions to be asked on any given topic, and allowing for large sample sizes.

Secondary Data

The researcher was able to better grasp the subject from the viewpoints of other authors by collecting secondary data from books, magazines, and blogs. One of the most significant methods we used to collect secondary knowledge was to examine the sources of pertinent papers in order to take into account the broad concepts and context of that research. As a consequence of our research, to address and look into another crucial area in the literature on change. We investigated the concept and found several hypotheses that support and explain it, as well as provide solutions. We were also able to decide what information should be gathered from primary and secondary sources of data thanks to our research of the literature.

Chapters

### 1. THE INDIAN BANKING SECTOR AND INFORMATION TECHNOLOGY

Banks are now marketing their products and services through a variety of cutting-edge and alluring technology-based multichannel. The method was created with the introduction of computers as ledger recording devices in the 1970s. Many back-office and customer-facing tasks in banking processes are automated. Early in the 1980s, the Reserve Bank of India established two groups to hasten the financial

system's restructuring. economic operations Under the direction of the, a high-level group was formed, and Dr. C. Rangarajan served as its head as a phased computerization and automation plan was developed. Businesses that previously only sold their goods and services through physical branches are now starting to do so through a variety of inventive and technological avenues.

These include tools like automated teller machines, internet banking, and others. Machines, mobile banking, phone banking, television banking, etc.

The realm of novel delivery networks is E-banking, also known as internet banking. Electronic banking is a long-standing practice in the field of digital finance. Automated teller devices and phone payments (ATMs). In recent years, it has become more widespread. Everything has altered thanks to the internet, a digital distribution method that made banking operations easier.

## 2. IMPACT OF INTERNET BANKING IN INDIA

### 2.1 Indian E-Banking Scenario

The I-Banking was first introduced in India by ICICI around the year 1996. After that many other banks followed it and started providing Internet banking, such as, HDFC, Indusind bank, IDBI, Citibank Trust banks, etc. At present both the private and the foreign banks are eager to capture the market through Internet banking hence “the competition is heating up and the lack of technology and sufficient legal framework can make a bank loose a customer” so now the public banks are breaking the shackles of traditional set-up and gearing up to face the competition posed by the private sector counterparts.<sup>1</sup>

The time period of 1996 to 1998, can be defined as early adoption phase for e-banking in India. But public sector banks were the late adopters of the e-banking services. SBI owns the pride of being pioneer among public sector banks to start providing e-banking services to its customers. Although, it experienced tremendous increase in usage of e-banking in 1999,

due to lower ISP internet fee & charges, increased PC penetration and tech-savvy environment.<sup>2</sup>

### 2.2 Services and Product Provided through Internet Banking

Online/ Internet banking allows a user to execute financial transactions via the internet. Online banking is also known as "internet banking" or "web banking." An online bank offers customers just about every service traditionally available through a local branch, including deposits—these are done online, using ATMs or through the mail—and online bill payment.<sup>3</sup> In other words, it is a web- based service, through which the bank customers can access their required account details. The customers through their personal identification number (PIN) issued by banks can log in to banks website and avail themselves of their online services after being verified by the banking system. The range of products and services offered by banks online on the internet differs widely in their content. Basically, most of the banks provide online services as a value-addition service.

### 2.3 Services provided through Internet Banking-

#### i. Account Information

It is the summary of all bank transactions done by the specific person i.e., summary of all bank accounts or bank statement. It enables a person to track all the transactions and retrieve information regarding the same with the help of the details of the cheque number issued, amount of the transaction and date. It also provide account statements and transaction report, also allows the customer to download and print the same bank account statement.

#### ii. E-Cheque (Online fund transfer)

It is a mode of transferring funds from one account to another account through online banking. Even if they have an account with the same bank or any other bank anytime, anywhere, using third party fund transfer option.

#### iii. Bill payment service

<sup>1</sup> *id*

<sup>2</sup> Available at <http://shodhganga.inflibnet.ac.in/bitstream/10603/89802/6/chapter%204.pdf> last accessed on January 4, 2019

<sup>3</sup> Available at <https://www.investopedia.com/terms/o/onlinebanking.asp> last accessed on January 4, 2019

As the name suggests it is a service provided by banks which helps the customer to manage their payment of bills. Through this the account holders can pay their monthly bills, such as, telephonic bill, electricity, mobile phone, insurance etc. at any time anywhere for free and timely. Make bill payments at customer convenience from their home or office.

iv. Request and Intimation

Can online submit request for

- Cheque book
- Stop payment instruction.
- Opening a fixed deposit
- Intimate for loss if ATM card
- Online application for debit card
- Cheque status, etc.

v. De-mat Account share trending

De-mat is commonly known as ‘Dematerialization’, which is a process whereby securities like share, debentures are converted from the ‘material’ (paper documents) into electronic data and stored in the computer of an electronic depository. These facilities are faster, risk-free and cost effective.

Bank provides many more other services also through internet banking, such as, share trending, Automated Teller Machines(ATM), balance enquiry, mini statement, deposit cash/cheques, funds transfer, PIN change, payment, etc.

### 3. REGULATION OF INTERNET BANKING IN INDIA

It is impossible to expect the law to keep up with technological advancements. The recent crisis of virtual voyeurism has highlighted the insufficiency and weaknesses of the rules governing internet use, among other things. Determining who is to be blamed or who is liable, recording, providing proofs is and deciding the jurisdiction are some of the issues which are not going to be resolved anytime soon. Concerns about e-banking security and misuse have been

growing as more Indian banks enter the electronic banking market.<sup>4</sup>

Though the basic purpose or objective of a bank is to do public good, its known that banking has always been a commercial business, with banks’ primary goal being to increase profits. Recently due to adoption of new policies changing the economic market, such as, liberalization, privatization and globalization has become a big concern for the banks. Indian banks have also seen a tremendous transformation, with liberalization, technology advancements, and globalization having a big impact on banking services.<sup>5</sup>

#### 3.1. Banks' and Online Banks' Obligations

Banks must maintain the secrecy of customers’ accounts<sup>6</sup>. This obligation dates to 1924 wherein a case is popularly known as the Tournier case<sup>7</sup>, in which it was held that bankers should not disclose a customer’s financial position and the nature and the details of his account to anybody, since it may affect his reputation, creditworthiness and business. Now with the advent of new technology, this obligation has become a difficult task for there are hackers who can operate other’s accounts. Bankers are not in a position to trace them. They only find out when a customer informs them of an error in their transaction. As a result, in order to meet this requirement, banks must update their technology.

#### 3.2. RBI Circulars to Control risk due to Internet Banking

The Reserve Bank of India (RBI) has issued a new Internet Banking Circular. As a supervisor, the Reserve Bank of India will cover all risks associated with electronic banking as part of its regular duties. Every bank is required by law to develop a clear Customer Acceptance Policy outlining explicit criteria for customer acceptance. The Customer Acceptance Policy must ensure that explicit guidelines on the

<sup>4</sup> ANKUR GUPTA, *Data Protection in consumer E-Banking*, *Journal of Internet Banking and Commerce*, 11 (2006), p.1.

<sup>5</sup> RIMPI KAUR, *An Impact of IT on Branch Productivity of Indian Banking in the Era of Transformation XVII*

*Journal of Internet Banking and Commerce* (2012), p.2.

<sup>6</sup> Section 13 of *Banking Companies (Acquisition and Transfer of Undertaking) Act, 1970*.

<sup>7</sup> *Tournier v. National Provincial & Union Bank of England*, (1924), K.B., 461.

following aspects of the bank's customer relationship are in place.<sup>8</sup>

- No account should be opened in anonymous or fictitious/benami name.<sup>9</sup> Banks should not permit the establishment or maintenance of anonymous accounts in fictitious names or accounts on behalf of other people whose identities have not been disclosed or cannot be verified.
- Risk perception parameters are clearly defined in terms of the nature of business activity, location of the customer and his clients, mode of payment, volume of turnover, social and financial status, and so on, allowing customers to be classified as low, medium, or high risk.<sup>10</sup> Customers who require an extremely high level of monitoring may be classified even higher if deemed necessary.

### 3.3. Laws relating to I-Banking in India

Banking law in India has changed dramatically since the advent of technology. The changes have occurred as a result of the worldwide banking revolution. The transformation was required to meet the international standard in service. Existing laws have been amended to accommodate the needs of banking technology.

#### 3.3.1. Reserve Bank of India Act, 1934

The Reserve Bank established the Committee for Proposing Legislation on Electronic Funds Transfer and Other Electronic Payments in 1995.<sup>11</sup> The Reserve Bank of India Act, 1934 (hereinafter referred to as the RBI Act, 1934) was amended in response to the recommendation. A new clause<sup>12</sup> Section 58, sub-section 2 of the Act, relating to the regulation of funds

transfer through electronic means between banks, i.e. transactions such as Real Time Gross Settlement (RTGS) and National Electronic Funds Transfer (NEFT) and other funds transfer, was added to facilitate such EFTs and ensure legal admissibility of documents and records, was added. The RBI promoted electronic payment systems by launching the Electronic Clearing Service (ECS) and EFT systems in 1995, the RTGS system in 2004, the NEFT system in 2005, and the Cheque Truncation System (CTS) in 2008.<sup>13</sup>

#### 3.3.2. Negotiable Instrument Act, 1881

Under this Act, a cheque<sup>14</sup> includes an electronic image of truncated cheque in the electronic form. A digital signature with or without a biometric signature and an asymmetric cryptosystem are included in the definition of a cheque in electronic form.

#### 3.3.3. Bankers' books of Evidence Act, 1891

After the introduction of E-Banking in India, the Bankers Books Evidence Act was amended. 'Bankers books' are defined in Section 2 of the Act. This includes ledgers, daybooks, cashbooks, account books, and all other records used in the ordinary business of the bank, whether they are kept in written form or stored on microfilm, magnetic tape, or any other mechanical or electronic data retrieval mechanism, onsite or offsite, including a back-up or disaster recovery site of both.<sup>15</sup> And printout of any entry in the books of a bank stored in a micro film, magnetic tape or in any other form of mechanical or electronic data<sup>16</sup> retrieval mechanism obtained by a mechanical or other process which in itself ensures

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<sup>8</sup> RBI Vide Circular DBOD. AML. BC. No. 11/14.01.001/2012-13 available at <https://rbidocs.rbi.org.in/rdocs/notification/PDFs/KYC101212CFS.pdf>. accessed on January 10, 2019

<sup>9</sup> Government of India Notification dated June 16, 2010 Rule 9, sub-rule (1C) available at <https://www.rbi.org.in/scripts/NotificationUser.aspx?id=5750&Mode=0>. Accessed on January 11, 2019

<sup>10</sup> Banks may choose any suitable nomenclature viz. level I, level II and level III available at <https://www.rbi.org.in/CommonPerson/english/scripts/notification.aspx?id=79>. Accessed on January 11, 2019

<sup>11</sup> Shere Committee on Electronic Fund Transfer and Electronic Payment available at <https://www.rbi.org.in/scripts/PublicationReportDetails.aspx?ID=28> accessed on January 11, 2019

<sup>12</sup> Section 58 (2) (pp) of the RBI Act.

<sup>13</sup> *Supra* Note 35

<sup>14</sup> Section 6 of the Negotiable Instrument Act, 1881.

<sup>15</sup> S.N.GUPTA, 'The Bankers Books Evidence Act, 1891', New Delhi, Universal Law Publishing House, (2011), p.401. (This new definition was inserted in 2003).

<sup>16</sup> Negotiable Instrument Act, 1881 By Amendment Act No. 55 of 2002 .

the accuracy of such printout as a copy is admissible as evidence.<sup>17</sup>

3.3.4. Prevention of money laundering Act, 2002  
Money laundering is a major underground economy operation that involves engaging in financial transactions in order to disguise the identity, source, and/or destination of money. Money laundering<sup>18</sup> is defined as the the conversion or transfer of property, knowing that such property is derived from a serious crime, for the purpose of concealing or disguising the the illicit origin of the property or of assisting any person who is involved in committing such an offense or offenses to evade the legal consequences of his action, and the concealment or disguise of the true nature, source, location, disposition, movement, rights with respect to, or ownership of property, knowing that such property is derived from serious crime. In other words, the source of illegally obtained funds is obscured through a succession of transfers and deals in order that those same funds can eventually be made to appear as legitimate income.

3.3.5. Information Technology Act, 2000  
This is India's most important legislation dealing with technological offenses. In banking and finance, technological innovation in general and IT applications, in particular, have had a significant impact.  
Because the entire foundation of Internet banking is built on technology and security standards, they are critical. Internet banking will not provide the anticipated benefits if the technology and security requirements are weak, and it will eventually fail.<sup>19</sup> The adoption of a company's new technology has been identified as a crucial aspect of the entire technological transition process.<sup>20</sup> Information security is concerned with the use of technical solutions and management measures to preserve three

properties of information: confidentiality, integrity, and availability.<sup>21</sup> The IT Act 2000 was amended in 2008<sup>22</sup> enlarging definitions, introducing the concept of electronic signature, creating new offenses, and many more things. IT Act, 2000 had only two sections<sup>23</sup> dealing with computer-related offenses generally.

#### 4. LEGAL ISSUES AND CHALLENGES INVOLVED IN INTERNET BANKING

During deliberations, the Group discussed certain issues where the legal position is not clear but has a bearing on Internet banking. Certain issues have also not been addressed by the Information Technology Act, 2000. Such issues are briefly discussed below. The Consumer Protection Act 1986 defines the rights of consumers in India and is applicable to banking services as well. The issues of privacy, secrecy of consumers' accounts and the rights and liabilities of customers and banks, etc. in the context of Internet banking have been discussed in earlier paragraphs. In cases where bilateral agreements defining customers' rights and liabilities are averse to consumers than what are enjoyed by them in the traditional banking scenario, it is debatable whether such agreements are legally tenable. For example, whether a bank can claim immunity if money is transferred unauthorizedly by a hacker from a customer's account, on the pretext that it had taken all reasonable and agreed network security measures. In a traditional banking scenario, a bank has normally no protection against payment of a forged cheque. If the same logic is extended, the bank providing I-banking may not absolve itself from liability to the customers on account of unauthorized transfer through hacking. A similar position may be obtained in case of denial of service. Even though The Information Technology Act, 2000 has provided for penalty for denial of access to a computer system (Section-43) and hacking (Section – 66), the liability

<sup>17</sup> Section 2A of the *Bankers Books Evidence Act, 2002*.

<sup>18</sup> Article 1 of *European Communities Directive, 1990*

<sup>19</sup> ASHOK SHANKARRAO PAWAR & SUNITA J. RATHOD, *Incorporation of Information Technology Act in Banking Transactions III Indian Journal of Applied Research*, (2013), p.158.

<sup>20</sup> TIMOTHY H. HANNAN & JOHN M. MCDOWELL, *Rival Precedence and the Dynamics of Technology Adoption: An Empirical Analysis* LIV *Economica* New Series (1987), pp. 155-171

<sup>21</sup> Aaron M. French, *op. cit.*, p.3.

<sup>22</sup> Act No. 13 of 2008

<sup>23</sup> Section 43 and 60 of the IT Act, 2000

of banks in such situations is not clear. The Group was of the view that the banks providing Internet banking may assess the risk and insure themselves against such risks.

#### 5. SUGGESTION

Due to ignorance, e-banking is not commonly used in rural regions. Banks should take the necessary actions to inform their clients about the various E-Banking services that are offered, as well as the advantages of using those services. Customers should receive E-Banking demos to entice them to use the service.

Banks should focus on cybersecurity issues, including vulnerable sensitive identities in the online world. To increase the number of people who use the service, the cost of getting Internet Banking services should be decreased. To make online inquiry and payment even easier, the E-Banking infrastructure needs to be improved.

#### 6. CONCLUSION

The advent of Internet Banking in the banking industry has led towards certain integral changes in banking relationships and it has moved onto working in both a positive and negative manner. As was previously discussed in the earlier chapter Internet banking includes utilizing banking services by customer and prescribing those services to customers by banking institutions through the medium of internet banking. Due to this the resultants have been provided with the privileges which were previously individually held by the financial institutions which have been a victim to the considerable reduction considerably. Due to use of internet in the banking industry, it has brought many advantageous benefits to banks as well as to the customer which were previously could not be able to or be accessible in a physical or traditional banks, such has it has broadened the scope to access to customer in a global market, i.e., without being restricted to geographical boundaries of a nation. Internet banking is a cost-effective medium for financial institutions. It is not only beneficial for financial institutions, but it also brings many benefits and advantages to its customers as well; thus, more and more consumers are willing to embrace its benefits.