International Journal of Commerce and Management Research
ISSN: 2455-1627; Impact Factor: RJIF 5.22
Received: 28-11-2018; Accepted: 29-12-2018
www.managejournal.com
Volume 5; Issue 1; January 2019; Page No. 62-69

The effect of electronic banking in financial supply chain of India

Panjagari Sainath
Assistant Professor in Commerce &Business Management, Siva Sivani Degree College, Kompally Hyderabad, Telangana, India

Abstract
Information technology is fundamentally changing the banking industry and financial supply chain activities worldwide. While the advent of e-banking offers banking firms a new frontier of opportunities and challenges, it is also transfiguring the way business is showed in every industry. Banks, corporations, governmental agencies and other financial institutions in India are not exceptions to this transformation. This study aims at scrutinizing the effect of e-banking on the banking industry as well as its influence on financial supply chain; if India is to adopt modern banking system. The study was based on qualitative methodology and two types of interview monitor questions were administered to some selected bank officials of the four banks and bank customer company managers using purposive and formless interviewing techniques. Findings from the study indicate that e- banking services in India are not yet initiated remarkably. The implementation of modern banking systems is believed to solve current challenges in the banking industry, in the financial supply chain and in e-business as a whole.

Keywords: technology, India, chain and in e-business

Introduction: Overview

Even though there are different definitions of the word financial supply chain. It can be described as "parallels the physical or materials supply chain and represents all transaction deeds related to the flow of cash from the customer's primary order through reconciliation and payment to the seller". In other words, the financial supply chain is different from the physical supply chain, because it deals with the flow of cash instead of goods. While, the purpose of financial supply chain is to obtain visibility over the purchase-to-order and order-to-cash processes, the role of financial supply chain management is simply to manage the financial supply line, now consistent as a chain, from source to destination and back. It is about looking at how to optimize working capital of a company, not only from an interior point of view, but also from an exterior point of assessment.

When companies move from regional to global sourcing their working capital and supply chain performance is undesirably affected, due to shipment and payment delays. In resolving this issue, financial inventors of the organizations put their attention on their banks to enhance their financial supply chains which could be provided by e-banking system. E-banking refers to systems that enable bank customers to access accounts and general information on bank products and services through a personal computer or other intellectual devices. Supply Chain Finance (SCF) gives trade banks the tools they need to align their assistances with their customers' developing supply chain needs. It describes the activities involved in planning and accomplishing payments between trading partners. The whole goal of SCF is to enhance working capital throughout the end-to-end supply chain for both buyers and sellers.

Profile of the Reserve Bank of India

The Reserve Bank of India was recognized on April 1, 1935 in accordance with the necessities of the Reserve Bank of India Act, 1934. The Central Office of the Reserve Bank was originally established in Calcutta but was perpetually moved to Mumbai in 1937. The Central Office is where the Governor sits and where guidelines are framed. Though in the beginning privately owned, since nationalisation in 1949, the Reserve Bank is fully having possession of the Government of India.

Preamble

The Preamble of the Reserve Bank of India defines the basic purposes of the Reserve Bank as: "to standardize the issue of Bank notes and keeping of funds with a view to securing financial stability in India and generally to operate the money and credit system of the country to its improvement; to have a modern financial policy framework to encounter the challenge of an increasingly multifaceted economy, to maintain price strength while keeping in mind the objective of progress."

Main Functions

Monetary Authority

- Communicates implements and monitors the fiscal policy.
- Objective: sustaining price strength while keeping in mind the objective of growth.

Regulator and supervisor of the financial system

- Recommends broad parameters of banking processes within which the country's banking and financial system functions.
- Objective: maintain public self-assurance in the system, safeguard depositors' interest and make available economical banking services to the public.

Manager of foreign exchange

- Accomplishes the Foreign Exchange Management Act, 1999.
- Objective: to facilitate exterior trade and payment and

endorse orderly growth and preservation of foreign exchange market in India.

Issuer of currency
- Issues and exchanges or abolishes cash and coins not fit for exchange.
- Objective: to give the public satisfactory quantity of supplies of money and coins and in good quality.

Developmental role
- Does a wide range of positive roles to support national objectives.

Related Functions
- Banker to the Government: performs trading banking function for the central and the state governments; also acts as their banker.
- Banker to banks: maintains banking accounts of all scheduled banks.

Legal Framework

I. Activities administered by Reserve Bank of India
- Reserve Bank of India Act, 1934
- Public Debt Act, 1944/Government Securities Act, 2006
- Government Securities Regulations, 2007
- Banking Regulation Act, 1949
- Foreign Exchange Management Act, 1999
- Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002 (Chapter II)
- Credit Information Companies(Regulation) Act, 2005
- Payment and Settlement Systems Act, 2007
  - Payment and Settlement Systems Regulations, 2008 and Amended up to 2011 and BPSS Regulations, 2008
  - The Payment and Settlement Systems (Amendment) Act, 2015 - No. 18 of 2015
- Factoring Regulation Act, 2011

Financial Supervision

The Reserve Bank of India accomplishes this function under the guidance of the Board for Financial Supervision (BFS). The Board was established in November 1994 as a commission of the Central Board of Directors of the Reserve Bank of India.

Objective

Primary objective of BFS is to undertake united supervision of the financial sector containing commercial banks, financial institutions and non-banking finance companies.

Constitution

The Board is established by co-opting four Directors from the Central Board as members for a term of two years and is led by the Governor. The Deputy Governors of the Reserve Bank are ex-officio associates. One Deputy Governor, usually, the Deputy Governor in charge of banking guideline and administration, is nominated as the Vice-Chairman of the Board.

BFS meetings

The Board is essential to meet normally once every month. It considers review reports and other administrative issues placed before it by the administrative departments.

BFS through the Assessment Sub-Committee also aims at advancement the quality of the statutory audit and internal audit functions in banks and financial organizations. The assessment sub-committee includes Deputy Governor as the chairman and two Directors of the Central Board as members. The BFS supervises the functioning of Department of Banking Supervision (DBS), Department of Non-Banking Supervision (DNBS) and Financial Institutions Division (FID) and gives directions on the supervisory and administrative issues.

Functions

Some of the initiatives taken by BFS include
1. rearrangement of the system of bank checkups
2. introduction of off-site investigation,
3. strengthening of the role of statutory auditors and
4. Strengthening of the internal defences of supervised institutions.

The Audit Sub-committee of BFS has reviewed the current system of concurrent audit, norms of empanelment and appointment of constitutional auditors, the quality and coverage of statutory audit reports, and the important issue of greater clearness and disclosure in the published accounts of administered institutions.

Current Focus
- supervision of financial institutions
- consolidated accounting
- legal issues in bank frauds
- divergence in assessments of non-performing assets and
- Supervisory rating model for banks.

State Bank of India (SBI)

The beginning of the State Bank of India goes back to the first time of the nineteenth century with the formation of the Bank of Calcutta in Calcutta on 2 June 1806. Three years later the bank received its commission and was re-designed as the Bank of Bengal (2 January 1809). A distinctive institution, it was the first joint-stock bank of British India sponsored by the Government of Bengal. The Bank of Bombay (15 April 1840) and the Bank of Madras (1 July 1843) followed the Bank of Bengal. These three banks continued at the apex of contemporary banking in India till their consolidation as the Imperial Bank of India on 27 January 1921.

Primarily Anglo-Indian creations, the three presidency banks came into existence either as a result of the obligations of imperial finance or by the felt needs of native European commerce and were not obligatory from outside in an arbitrary manner to modernise India's economy. Their evolution was, however, shaped by ideas culled from similar developments in Europe and England, and was influenced by changes occurring in the structure of both the local trading atmosphere and those in the associations of the Indian economy to the economy of Europe and the worldwide economic framework.

SBI provides full retail and commercial banking services the bank is government owned and it is charged with: promotion of savings and provision of credit, promotion of exports, foreign exchange and trade, stimulation of agricultural production and rural development, and financing the working capital requirements of the industrial sector

National Housing Bank

The Preamble of the National Housing Bank Act, 1987 describes the basic purpose of the NHB as – "to operate as a principal assistance to encourage housing finance institutions both at local and district levels and to afford financial and other support to such institutions and for matters associated therewith or accompanying thereto …"

NHB has been established to achieve

- To encourage a sound, healthy, viable and cost effective housing finance system to supply to all segments of the population and to integrate the housing finance system with the complete financial system.
- To boost a network of enthusiastic housing finance institutions to adequately serve various regions and different income groups.
- To enlarge resources for the sector and channelize them for housing.
- To make housing credit more inexpensive.
- To regulate the activities of housing finance companies based on controlling and guiding authority derived under the Act.
- To boost expansion of supply of buildable land and also building materials for housing and to improve the housing stock in the country.
- To encourage public agencies to develop as enablers and suppliers of serviced land, for housing.

Investment Banking in India

It all started in 19th Century. During that period, European banks first recognized their trading industries in the land of India. Subsequently that ancient time, foreign banks have taken the reign of investment banking in India. But that didn't last for a long time.

Till the 1980s, banking didn't get the buildup it deserved. In the 1990s, banking became an industry when more than 1500 bankers listed with SEBI (Securities and Exchange Board of India). To regulate these huge numbers of banks, it was required to build an organization which will help banks observe to the compliance and regulations. And that's how Association of Investment Bankers of India (AIBI) got started. The objective of AIBI is to regulate the legal and principled practices among members and also to promote and encourage the development of the industry. Under AIBI, now there are many banks and financial organizations are registered. Some of them are ICICI Securities, Axis Bank ltd, HDFC Bank Ltd, SBI Capital Market Ltd etc.

Problem Statement

In today's modern economies the payment for the goods and services in the supply chain finance is accomplished using e-banking. The developed economies, for instance, European and United States of America (USA) economies are comprehensively using the advantages of e-banking to advance competitive advantage, decrease their costs, increase their financial services, enlarge their customer databases, and to improve their financial positions. This study, therefore, mainly focuses on discovering the applicability and effectiveness of e-banking in determining the glitches of cash flow, liquidity, invoicing, information, communication and other subject related to financial supply chain as well as financial transaction of under developed economies like that of India.

Research Problems

- How can e-banking facilitate payment and invoicing progressions in the supply chain?
- What are the adoption barriers and solutions of internet banking?
- Do banks in less developed countries; under developing countries like India have the concept and knowledge of online banking? What about their willingness to adopt the new technology?

Purpose of the study

The gap of using internet equipment in banking system between the advanced and less developed economies disadvantaged and marginalized economies from the worldwide expansion of international trade. The importance of e-banking in assisting India supply chain finance on one hand, and nourishing domestic markets on the other hand, are some of the motivating factors to conduct research on the title. Further, the study also has a emphasis on the current problems of the industry such as, technological infrastructure, knowledge about the issue, and confidence and fear of risk. Thus, the purpose of this study aims to discover the effectiveness of internet banking in financial supply chain in the context of less developed economies along with the following research ideas.

Research objectives

- To categorize the advantages and disadvantages of internet banking in the progression of cash flow management beside the supply chain.
- To identify the risks and ways of avoiding them during adopting e-banking system.
- To identify the basic infrastructure necessities that could enable online banking adoption.

Significance of the study

The application of banking systems in managing financial supply chain in most of rural India, remain underdeveloped as compared with other developing regions. According to IMF, however, recent developments, such as the expansion of mobile phone-based banking, have the potential to significantly change the landscape for banking in much of rural India. In India, the use of online banking in changing the way that companies will interact with their customers, business partners and suppliers is none existent. On top of that, in anticipation of these days, very diminutive research has been conducted concerning the given topic. An understanding of how internet infrastructure, the knowledge of users and employees of banks, and insights and attitudes of community toward e-banking influence the adoption of online banking. It is visualized that the study will make a theoretical and conceptual contribution to the body of knowledge interrelated to the impact of financial supply chain on international trade with a particular emphasis on banks and entrepreneurs in India. Therefore it is important and timely to conduct a research such as this.

Scope

The study was limited to the capital city of Hyderabad city in the state of Telangana. This is because:

- All most all headquarters of banks and companies are located at Hyderabad for the state of Telangana, the capital city of the State;

- Main operations and transactions of banks and related financial organizations are finalized at the Hyderabad city;
- The researcher could find the required data for the research without travelling to banks and companies outside the city.

Limitations

Online banking is not yet introduced in India to the greater extent; consequently there is the possibility of information shortage.

- Time and budget constraint;
- The research was done through interviewing selected bank managers, bank employees, business people and researcher`s observation. Therefore it may not be possible to make a sweeping statement the results of this study to all bank workers and entrepreneurs.

Literature Review

Mishra & Kotkar (2015) trace the timeline and development of B2C e-commerce in "A Study on Current Status of E-Commerce in India: A Comparative Analysis of Flipkart and Amazon "with its inception in the mid-1990s through the advent of matrimonial and job portals. However, due to limited internet accessibility, weak online payment systems and lack of awareness, the progress was very slow. The Indian B2C e-commerce industry got a major boost in mid 2000s with the expansion of online services to travel and hotel bookings which continue to be major contributors even today.

Das & Ara(2015) observe in "Growth of E-Commerce in India "that though online travel and hotel bookings still control the lion's share of e-commerce market, their share has comparatively fallen over the years due to the recent augmentation and consequent rise of e-tailing services. There has been a tremendous surge in the volume of investment in this sector. With the e-commerce markets in the west reaching their saturation, investors see tremendous potential in the Indian market, in the light of which, many startups have received funding from venture capitalists and private equity firms

China's Alibaba Group and affiliate Ant Financial became the largest shareholders of One97 Communications, the parent of Indian e-tailer Paytm, by investing $680 million, in 2015

Rina (2016) elaborates the different applications of e-commerce in "Challenges and Future Scope of Ecommerce in India", at the same time, defining the degree to which they are operational in the country.

In today`s global economy electronic business (e-business) is increasingly become a necessary element of business strategy and a strong compound for economic development. Through this strategy that is simple and practicable within the context of a global information era and contemporary digital and economic environment, states, companies, and individuals are able to determine emerging opportunities and utilize the essential digitalized technologies to make the most of these opportunities. The rise of the internet as a communication frequency has changed the economics of information, gives rise to chances, new forms of association, new forms of connections and new forms of operations between organizations. Precisely, the use of information and communication technology (ICT) in business has enhanced productivity, encouraged greater customer participation, and enabled mass customization, besides reducing costs.

The concept of financial supply chain

The conception of financial supply chain is connected to traditional and modern payment systems, supply chain management, and many more aspects. Traditional (TPS) vs modern payment systems (MPS): A conservative or traditional process of payment and settlement involves a buyer-to-seller transfer of cash or payment information (Cheque and credit cards). The actual disbursement of payment takes place in the financial processing system in a sense that, cash payment requires a buyer's withdrawals from his bank account, a transferal of cash to the seller, and the seller`s deposit sum of payment to his account. Unlike the traditional system, the modern and highly developed payment system, where the currency and notes are transformed to data, which are in turn communicated through the telephone lines and satellite transponders, is called e-payment system. It is managed by banks under the restraint named financial supply chain (FSC).

Supply chain (SC) and supply chain management (SCM)

A supply chain is the network of all the activities involved in delivering a finished product/service to the customer. In this process raw materials are sourced, assembled, stored, ordered, distributed and delivered. Creating an effective supply chain requires emerging strategic objectives and tactics, integrating and coordinates activities in the internal portion of the supply chain, coordinating activities with suppliers and customers, coordinating planning and implementation across the supply chain and considers forming strategic partnerships. The vital business function that coordinates all of the network links through supply chain from suppliers to manufacturers to merchants was traditionally called logistics. These days, the term "logistics" is replaced with the complete term "supply chain management" (SCM). It is perceived as the task of integrating organizational units along a SC and coordinating resources, information and financial flows in order to accomplish customer demands with the aim of improving effectiveness of the supply chain as a whole.

Financial supply chain (FSC) and its management (FSCM)

While, the purpose of FSC is to obtain reflectiveness over the purchase to-order and order-to-cash processes, the role of financial supply chain management is merely to bring about the financial supply line, now connected as a chain, from source to destination and back. Supply chain financing (SCF), relates more specifically to as long as the appropriate financing facilities at the relevant points in the physical supply chain. This is to mean that, SCF is "a combination of trade financing on condition that by a financial institution, a third-party vendor, or a company itself, and a technology stands that unites trading partners and financial institutions electronically and provides the financing starts based on the occurrence of one or several supply chain events".

Effectiveness of FSC and FSCM

There is a diversity of methodologies and different frameworks to measure the presentation of financial supply chain and its management. The measurement of operational performance, typically centered on manufacturing and logistics developments such as order cycles and cash flow

cycles are well practiced.

The concept of electronic banking (e-banking)

E-banking is a delivery frequency for banking services. Electronic banking is a system that is meant to bring the banking services to age and ensure that today's banking services go beyond acceptance of deposit and creation of credit. E-banking includes the systems that facilitate financial institution customers, individuals or enterprises to access accounts, transact business, or attain information on financial products and services through a public or private network, like internet or mobile phone

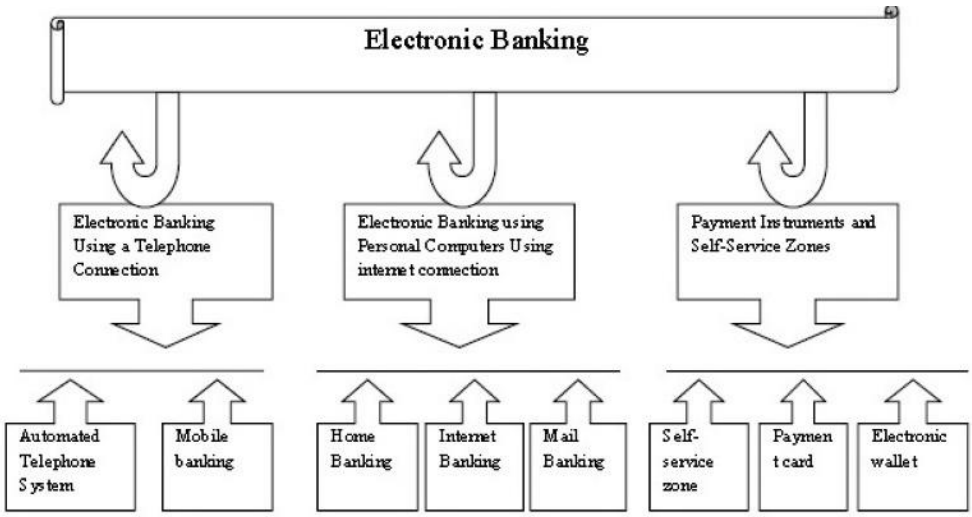

Fig 1

The concept of adoption of e-banking

Rapidly increasing and changing modernized information technologies have overwhelmed the global financial institutions like banks. The advancement of information technology worldwide has an massive effect on development of more flexible payment methods and user friendly banking services. These days, electronic banking services are being used with increasing regularity in most continents, including Africa. Aspects influencing the adoption of e-banking.

Relative advantage: It is defined as the degree to which a customer believes that using a particular system - which is new to the existing system - would develop job performance, influencing e-banking acceptance positively.

Complexity: This attribute as the extent to which an innovation can be considered relatively difficult to understand and use. For instance, banks website designs should be very simple by which customers can easily operate (ease of use).

Perceived credibility: It is the degree to which a user feels the certainty and pleasant significances of using an electronic application service, distinguishing that; financial, physical, purposeful, social, time-loss, opportunity cost, and information risks are nonexistent.

Trialability: Refers to the capacity to experiment with new technology before adoption. This helps potential adopters who are allowed to experiment with an innovation to feel more comfortable with it and are more likely to adopt it.

Perceived risk: This attribute refers to the degree of risks or trust (willingness to rely) in using an innovation.

Compatibility: Refers to the degree to which a service is perceived as consistent with users' culture. That is, with existing ethics, philosophies, customs and present and previous experiences of users.

Research Methodology

Study design

The aim of this study is to observe the effect of electronic banking on supply chain finance of organizations operating under less developed economies with a detailed prominence on Rural India economies, taking India as a case study. For this purpose a qualitative rather than a quantitative research method of examination is chosen. As part of the qualitative approach to the study using secondary data analysis methods and conducting necessary interviews with bank as well as company managers in India, the researcher includes my own observation of the systems and technologies of the financial institutions, corporations and other concerning organizations use to make their global financial transactions and payments.

Data collection methods

Even though, both primary and secondary information was used in the research; there is substantial reliance on the primary one. Data was collected through discussions based on open-ended questions, dichotomous and Multichotomous questions. Important bank officials, knowledgeable staffs and bank customers (company managers) are selected to be converse with and form a sample size of 35 using the technique specified below. The list of banks under study taken into account of, State Bank of India (SBI), Housing Development Finance Corporation (HDFC), Industrial credit and Investment Corporation of India (ICICI), Axis Bank.

Target population and sample size

In conducting this study, the executives or staffs of the selected banks and the customers (company managers/owners) are the two target populations under study. It must be noted that these banks offer only traditional banking systems.

The sample size for each of the group was determined with deVaus formula below sited by Emmanuel

n=N =1+N ($\propto$2)

Where, n=sample size, N=population universe and $\propto$ is the confidence level. The formula adopted a confidence level of 90% and the margin of error is therefore 10% which is

standard in social science research. The break down for each of the group is considered as follows:
Bank officials (Staffs): where N=15

n=15/(1+15(0.12))

n=15/1.15=13.04 ~ 13

Thus, n=13 Bank Customers:

Where, N=28 N=28/ (1+28(0.12)) n=28/1.28=21.87 ~ 22

Therefore n=22.

Sampling technique
In qualitative research approach, 'purposive' rather than 'random', sampling technique is most often practiced. A good awareness of this type of sampling strategy and why it is used is essential to designing a credible qualitative study. In this research, for bank customers, about 10 local companies which are direct customers to the banks and having activities connected to global banking transactions are selected. At least 2 respondents (general managers and financial managers) for each concern were sampled, making twenty two (22) interviewees. Similarly, significant bank officials and experienced staffs from each bank are selected to be interviewed and formulate a sample size of 13. The purpose was to find out the effect of modern banking system on the company's international as well as local payments when they acquire goods for their place of work and to know the readiness of the banks to adopt e-banking as a business and as a solution to financial supply chain problems.
Data analysis: The analysis of each recorded interview will follow the process of data reduction, data display and the drawing of conclusions using the outline provided. The technique of data reduction helps to select, organize, refine, focus and summarize the data for analysis.
Construction of the final interview guide questions: In this research there are two target groups carefully chosen (bank staff and bank customers). Both groups are believed to reflect and provide sufficient and reliable data which can help to analyze the topic under study. Based on the nature of the target population two interview guides are prepared.

- Interview guide 1: The purpose of the questions in this guide is to collect data from staff of knowledgeable employees of the bank. The guide has 6 major topics having 5 questions each.
- Interview guide 2: It has alike arrangements as guide 1. The aim of the questions is to recognize customers' insight on banking systems, financial transactions and present problems with their solutions.

Quality data
Reliability and validity: Validity and reliability set up the credibility of a Research. In order to improve the validity of this study, the data was directly gathered with a well calculated methodology to sampling and the interviews of banking staff and customers addressed the issues elevated in the research questions. Furthermore, to increase the reliability of the study, concepts and existing theories were studied and carefully defined, presented and compared based on the literature review.

Results
Based on the interview guide questions and research questions the planning of the data arrangement is in accordance to: means of payment, electronic infrastructure of the banks, knowledge and capability, security and e-banking implementation. The results include the viewpoints of bank staffs and bank customers respectively. The researcher questioned a total of 10 individuals who have worked for more than 15 years at the banking industry and 16 company managers; subsequently he believed that a total of 26 respondents are enough for the required data. In other words, the data reached fullness point (ideas started to be repeated).

Findings (Bank staffs perspective)
Means of payment: As maximum staffs (8 out of 10) of the banks, distinguished the means of payment practiced in all the banks is using cheque, cash and transferring using letters from account to account. They explained that uniform payment by the use of cheque is at its initial stage, majority of their customers are not ease with with this system and they prefer to use cash to pay for every transaction they do. One of the respondents mentioned "Our banking payment system is completely traditional".
The RBI has taken many initiatives towards familiarizing and upgrading safe, sound and effective modes of payment systems in the country. currently, there are payments in India can be made through paper based instruments, electronic instruments and other instruments, such as, mobile banking, ATM based, Point-of-sale terminals, online transactions.

Electronic infrastructure of the banks (e-infrastructure): Nine out of ten, officials of the banks explained that e-infrastructure of their banks, as it is nonexistent. One respondent underlined saying that, even the computer processer and configurations that he is using is not updated. Most of the banks have internet connection, even though it is too slow, irregular, and in inconvenient

Knowledge and capability: Regarding this benchmarks most of the interviewees (8 out of 10) mentioned that their banks often employ either university or college graduates. Most of them (7 out of 10) also, agreed that, the employees lack applied training and uninterrupted upgrading courses, even though they know the system theoretically. One of them highlighted "at the moment the capability of the existing manpower of his bank to go with modern banking systems is not qualified, unless they are trained and get chance to practice it".

Security: The security of transacting on the internet is a major concern in implementing internet banking and it requirements is awareness of the public as well as bank employees to facilitate the adoption process. Assessment of the apprehension of bank officials in using internet banking indicates that, they would indulge from using modern banking systems, fearing from hackers or crackers. This idea was accepted by all interviewees.

Adoption of E-banking: Eight respondents emphasized that, since the early investment such as make known to an efficient internet service requires huge investment and permission

from the government, the initiative action is left on the hands of the government to encourage the E-banking. No doubt Indian government and banks are making sincere efforts for the adoption of advanced technology and for installation of e- delivery channels but still masses are wary of the concept and still there are many challenges cognate to the safety and security of the money and information so some special arrangements should be made by banks and infrastructure by government to ensure full security of customers' funds.

Findings (Bank customer's perspective)

Means of payment: The types of payments through, cash, cheque, and transfer from account to account are practiced by all banks. All interviewees believed. Ten out of sixteen (10/16) respondents supported that they also practice. Being cashless is one of the biggest agendas of the Indian government here are host of electronic transactions similar to NEFT, RTGS, IMPS, mobile banking and point of sale (PoS). Carrying NEFT, IMPS and RTGS transactions becomes quite easy once you have added beneficiaries in your account. This eradicates the need to visit bank branches at greater extent.

Electronic infrastructure of the banks: More or less all of the customers of the four banks agreed that, they get ineffective, time consuming and costly services from the banks. They explained the advantages of modern banking infrastructure saying "had our banks been prepared with modern e-banking infrastructures, such that computerized and networked, we would certainly not try to have needless amount of cash at hand, since it facilitates the payment". They prefer to suppress too much amount of cash at hand, just to facilitate their disbursements on time when they have local business transactions. This represents to 15 respondents out of 16.

Knowledge and capability: 13 out of 16 bank customers gave their positive perspective on knowledge and capability of young generation. They have no incredulity about human capital. They just emphasized, that new and existing graduates need to be trained, motivated and should be open to new technologies. The rest 3 respondents on the other hand, have an contrary point of view. They say that, most of the bank employees as well as the managers are not young and they are computer illiterate, so they can resist the introduction of modern banking systems.

Security: On the subject of the security issue, most of the respondents believe that the opportunity created by globalization created self-assurance on bank users. They just are waiting the introductions of modern banking systems, have confidence in that the system would be adopted with its security and protective measures. Appreciating this awareness, a respondent stated "we are not at the lead we are at the tail, so that our banks are privileged enough; in the meantime they can use E-Systems which are practiced and improved several times. While 14 respondents agree with this concept, only 2 interviewees disagree and said that face to face (physical participation) payment methods are the only safest one in our society.

Adoption of e-banking: The availability and frequent use of fast internet connection is essential for a successful adoption of e-banking. When respondents were asked if the process of e-banking adoption is easy or difficult, most of the respondents (12 out of 16) agreed that, building the infrastructure of fast, frequent, and appropriate internet connection as a communication tool is what makes it difficult. Once, such an infrastructure is set and insured its sustainability, it is easy to introduce e-banking. On the other hand few of the respondents (4 out of 16) have the insight that, theoretically our youths are at ease with the idea and concept of modern banking systems and its benefits, even though the older people could resist. One respondent revealed "for a successful adoption the process should be gradual. Meaning, instead of introducing high tech systems at the beginning, the banks should adopt step by step starting from moderate, but compatible technologies.

Discussion

Bank staff`s perspective (with-in case analysis)

Means of payment: The actual settlement of payments in the traditional method takes place using cash, cheque and transfers in the financial processing network. In the same way more or less all bank staffs participated in the study stated that cash, transfer and cheque sequentially are the means of payments their banks use.

Electronic infrastructure of the banks: In India one of the main challenges in the banking system is the existing e-infrastructure. It is outmoded and incompatible with modern systems as identified by the 9 respondents. Most bank staffs interviewed explained that internet banking is the plan of their business. This suggests that the banks are on track to introduce modern infrastructure to support their banking system.

Knowledge and capability: E-banking, especially internet banking is extremely influenced by employees competence. Interviewed bank officials have faith in that knowledge and practical training of bank employees is one of the main aspects influencing e-banking adoption. The results on this aspect by respondents show that, most of the bank employees absence knowledge of IT and e-business, practical training and familiarity with modern technologies, although most of them are computer literate and fast learners.

Security: The issue of security influences the quality of banking service to a great extent, even though it depends on the expertise and experience of bank employees as well as its technological infrastructure.

Adoption of e-banking: The main problem that can be mentioned here as emphasized by most of the respondents is the quality of the internet service. It is too slow and difficult to use it as a communication tool in the banking sector. The only way this service could be improved is through government investment, since it demands huge investment and political decision.

Security: The issue of security and risk was identified as a main barrier to adoption of e-banking. This is in contrary to what was found in this research. Simply this means bank customers have no fear of risk, because they rely on that the adoption of modern banking technological infrastructure is supported by modern and safe protection mechanisms to risk and fraud

Adoption of E-banking: Reasons given by bank customers

during interviews for presenting e-banking included fast internet connection, compatible banking infrastructure, applied training and gradual introduction of the system.

Cross case analysis

Means of payment: Bank staff and bank customers mentioned that, the payment system practiced by all banks is subjugated by cash in cash and to some extent by cheque. In their opinion, the system is in its traditional mode and there are no modern e-systems yet introduced to facilitate payment transactions.

Electronic infrastructure of the banks: The bank customers demand the introduction of modern banking system without preconditions. Bank staffs` perspective, in the other way, shows that they still have no plan to modernize their banking system, even though they have confidence in speedy renovation is the only solution. The importance of modern e-infrastructure has presented by several researchers in their previous researches

Knowledge and capability: Both groups perceive that, even though, the younger employees are computer knowledgeable and fast learners of the contemporary banking technology, they need to be supported by continuous training to new technology, practical experience and on the job training, motivation, empowerment, providing concern and accountability.

Security: While, bank officials consider security and risk issues have need of extremely skilled man power and sophisticated technological infrastructure to make available quality services, bank customers in the same way explained that they don't fear from risk, since they believe that the implementation of the system is accompanied by modern protective mechanisms.

Adoption of e-banking: The advancement of information technology worldwide has an enormous effect on development of more flexible payment methods and user friendly banking services. In the same way, both respondents in this study also explained their anticipation that the implementation of advanced banking services in India could assist them in solving problems and challenges remaining in payment transactions in the financial supply chain.

Recommendations

Recommendations are made in line with the factors influencing the progression of e-banking implementation: Relative advantage, complexity, perceived credibility, trial ability, perceived risk and compatibility.

Relative advantage: Based on the inferences drawn from this study, e-banking has relative advantage in enlightening service quality in the financial supply chain, when compared with the traditional banking system. Thus, bank officials should work hard in influencing decision makers' awareness in order to advance a step to introduce electronic banking.

Complexity: While, complexity negatively influences the adoption of e-banking, ease of use affects it positively. The status of the banks under study is identified that they are absolutely traditional. Therefore, the process of adoption of e-banking should take place step by step, since a new invention could be difficult to understand and use.

Perceived credibility: Banking services provided by the means of modern information technology systems are new to users. At this stage bank managers and concerning bodies should contribute their effort to make users feel the confidence and pleasant consequences of using an electronic application service, at least conceptually.

Trialability: Trialability helps potential adopters who are allowed to experiment with an improvement to feel more at ease with it and are more likely to adopt it. In the case of India, a pilot project e-bank should be implemented as soon as possible. This would help, firstly to give chance for banks to practice and train their staff, secondly to assist and understanding higher bank officials their managerial skills and thirdly it builds confidence and awareness of customers.

Perceived risk: It is particularly important that banks in India which are intending or planning to provide e-banking products and services ensure that the privacy and safety of their banking customers are positively guaranteed. This will encourage potential customers to influence and invest (knowledge or capital) in the process of adoption.

Compatibility: The process of transforming the system of the banks from traditional to modern type is influenced by so many factors, such as culture for instance banking culture. Thus, in implementing e-banking in the country, it is essential to study user necessities and needs, since the feature of innovation as conformance with user's lifestyle can propel a rapid rate of adoption.

Conclusion

To summarize, all the objectives and research questions of this study were successfully achieved. With respect to the process of e-banking adoption the following challenges were identified. Firstly, government initiatives to invest in the e-infrastructure such as internet connectivity, sustainable supply of energy and permitting e-banking services in the banking sector, which have an effect on resolving financial supply chain problems. Since Some of the banks in the country are government owned, the initiative mainly depends on the government. Secondly, yet there is no known plan to invest or initiate modern banking systems. Known strategy of action might give light to help bank managers to prepare their organization for transformation. Finally, since the working environment of all banks in India is absolutely traditional, transformational process could not be achieved easily. It involves massive investment.

References

1. Dixit N, Datta SK. Acceptance of E-banking among adult customers: an empirical investigation in India. J Internet Bank Commer, 2010.
2. Sumanjeet S. Emergence of payment systems in the age of electronic commerce: The state of art. Asia Pacific. Journal of Finance and Banking Research, 2009.
3. RBI website
4. SBI Website
5. Latest News and articles
6. Other source