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One Day State Level Seminar on
MORDEN BANKING SERVICES
Opportunities and Challenges

Organised by
POST GRADUATE AND RESEARCH DEPARTMENT OF COMMERCE



GOVERNMENT ARTS COLLEGE FOR MEN (Autonomous)

NAAC Accredited

Nandanam, Chennai – 600 035

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PRINCIPAL'S MESSAGE

Date: 05.01.2018



Dr.R.Prabakaran, M.Com., MBA., M.Phil., Ph.D.,
Principal

To

Dr.R.Seenivasagalu
Head and Associate Professor
Department of Commerce
Government Arts College for Men (Autonomous)
Nandanam, Chennai – 600035

Dear Dr.R.Seenivasagalu,

I am extremely happy to note that Commerce Department is Organizing a State Level Seminar in “**Modern Banking Services – Opportunity and Challenges**” on 05.01.2018 in the Abdul Kalam Auditorium.

I understand that this Seminar will discuss and deliberate many issues of Modern banking Services rendered by banks and come out with concrete solution for the problem faced by banker and customers to enhance better Banking Services in India .

I wish the Department and Participants all Success in their endeavors.

Principal

PREFACE

Banking industry is growing rapidly with understanding the requirements of customer by offering technological services like ATMs, online banking, telephone banking, and mobile banking and so on. This growth has been strongly supported by the development in the field of technology. With the development of information technology, the world has become a global village and it has brought a revolution in the banking industry. Bank customers are becoming very demanding and it is the extensive use of technology that enables banks to satisfy adequately the requirement of customers. Further the banking sector reforms and introduction of e-banking has made very structural changes in service quality, managerial decisions, operational performance, profitability and productivity of the banks. Further the banking sector reforms and introduction of e-banking has made very structural changes in service quality, managerial decisions, operational performance, profitability and productivity of the banks. E-banking is one of the emerging trends in the banking and is playing a unique role in strengthening the banking sector and improving service quality. It has enabled the banks to handle the payments electronically and inter-bank settlement faster and in large volumes. Customers can view the accounts, get account statements, transfer funds, purchase drafts by just making a few key punches. Use of advanced technology has led to the shift from traditional banking methods to modern banking methods. Currently, the most common and useful technology based on banking methods are online banking, Mobile banking, Video banking, Telephone banking, ATMs, Plastic money and so on. Hence, it is an appropriate topic to discuss in this seminar to enhance better banking services.

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A STUDY ON PROSPECTS AND CHALLENGES OF ONLINE BANKING SERVICES IN INDIA

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Abstract

The development and the increasing progress that is being experienced in the Information and Communication Technology have brought about a lot of changes in almost all facets of life. The new information technology is becoming an important factor in the future development of financial services industry, and especially banking industry. Internet banking is a new idea. Most of banks are using the Internet as a new distribution channel. Internet banking has the potential to transform the banking business as it significantly lowers transaction and delivery costs. The present paper is the outcome of an empirical study of prospects and challenges faced while online banking services. This paper discusses why internet banking is a very reliable way to manage finances. Internet banking provides great value in terms of convenience, customer intimacy, time saving, inexpensiveness and coherence in banking. Despite a few disadvantages, Internet banking is a highly recommended, new technology. With the time, the way banks used to operate has changed due to advent of internet in banking institutions. Further, this paper discusses the challenges and opportunities associated with the internet banking in Indian context. The discussion concludes that concept of internet banking is slowly gaining acceptance in Indian scenario and efforts are being made by government agencies to make it more popular among consumers.

Keywords: Internet banking, E-Banking, Prospects and Benefits, Challenges and Opportunities.

Introduction

The wind of liberalization sweeping through India has affected all sectors of the economy and centre of all these activities is the Indian Banking Industry. In such fast changing environment, to meet emerging needs, the operations in banks need immediate automation to provide services comparable to best international standards and to match technological changes taking place in other countries. The breathtaking advances in technology have shifted the focus from the concept of branch banking to anytime anywhere banking. Information technology has affected banks in two main ways. First, it has reduced costs by replacing paper-based, labour intensive methods with automated process. Secondly, it has modified the ways through which customers' have access to bank's services. With commerce becoming more and more computerized, banks are feeling the necessity to make an online presence. A sound and effective banking system is the backbone of an economy. The economy of a country can function smoothly and without many hassles if the banking system backing it is not only flexible but also capable of meeting the new challenges posed by the technology and other external as well as internal factors. The technology holds the key to the future success of Indian Banks. Thus, internet banking is the need of the hour, which cannot be lost sight of except at the cost of elimination from the competition. The existence of internet banking also becomes inevitable due to the standards required to be matched at the international level. Thus, the domestic as well as the international standards mandates the adoption of internet banking at the earliest possible moment.

Review of Literature

Vijay M. Kumbhar (2011) in his research paper "Factors Affecting the Customer satisfaction in E-Banking: Some evidences Form Indian Banks". This study evaluates major factors (i.e. service quality, brand perception and perceived value) affecting on customers' satisfaction in e-banking service settings.

This study also evaluates influence of service quality on brand perception, perceived value and satisfaction in e-banking. Contact Facilities, System Availability, Fulfillment, Efficiency and Compensation are comparatively less important because these dimensions explain 21.70 percent of variance in customers' satisfaction.

Pooja Malhotra & Balwinder SINGH (2009) In their research paper "The Impact of Internet Banking on Bank Performance and Risk: The Indian Experience". The paper describes the current state of Internet banking in India and discusses its implications for the Indian banking industry. Particularly, it seeks to examine the impact of Internet banking on banks' performance and risk. Using information drawn from the survey of 85 scheduled commercial bank's websites, during the period of June 2007, the results show that nearly 57 percent of the Indian commercial banks are providing transactional Internet banking services. The univariate analysis indicates that Internet banks are larger banks and have efficiency ratios and profitability as compared to non-Internet banks. Internet banks rely more heavily on core deposits for funding than non-Internet banks do. However, the multiple regression results reveal that the profitability and offering of Internet banking does not have any significant association, on the other hand, Internet banking has a significant and negative association with risk profile of the banks.

Objectives of the Study

1. To study the prospects and challenges of online banking services in India.
2. To know the opportunities and benefits of online banking services in India.

Preview of Online Banking

Online banking, also known as internet banking, e-banking or virtual banking, is an electronic payment system that enables customers of a bank or other financial institution to conduct a range of financial transactions through the financial institution's website. The online banking system will typically connect to or be part of the core banking system operated by a bank and is in contrast to branch banking which was the traditional way customers accessed banking services.

The customer visits the financial institution's secure website, and enters the online banking facility using the customer number and credentials previously set up. The facility may also enable the customer to order a cheque book, statements, report loss of credit cards, stop payment on a cheque, advice change of address and other routine actions. Today, many banks are internet-only institutions. These "virtual banks" have lower overhead costs than their brick-and-mortar counterparts.

Drivers of E-Banking

Internet banking is a cost-effective delivery channel for financial institutions. Consumers are embracing the many benefits of Internet banking. Access to one's accounts at anytime and from any location via the World Wide Web is a convenience unknown a short time ago. Thus, a bank's Internet presence transforms from 'brochureware' status to 'Internet banking' status once the bank goes through a technology integration effort to enable the customer to access information about his or her specific account relationship. The six primary drivers of Internet banking includes, in order of primacy are:

1. Improve customer access
2. Facilitate the offering of more services
3. Increase customer loyalty
4. Attract new customers
5. Provide services offered by competitors
6. Reduce customer attrition

Services of E-Banking

a. Bill Payment Service

Each bank has tie-ups with various utility companies, service providers and insurance companies, across the country. This system can facilitate payment of electricity and telephone bills, mobile phone, credit card and insurance premium bills. One-time standing instruction will ensure that on your bill payments due to lack of time. Most interestingly, the bank does not charge customers for online bill payment.

b. Fund Transfer

One can transfer any amount from one account to another of the same or any another bank. Customers can send money anywhere in India. Once customers login to their account, they need to mention the payee's account number, his bank and the branch. The transfer will take place in a day or so, whereas in a traditional method, it takes about three working days.

c. Credit Card Customers

Credit card users have a lot in store. With Internet banking, customers cannot only pay their credit card bills online but also get a loan on their cards. Not just this, they can also apply for an additional card, request a credit line increase and God forbid if you lose your credit card, you can report lost card online.

d. Railway Pass

This is something that would interest all the aam janta. Indian Railways has tied up with ICICI bank and you can now make your railway pass for local trains online. The pass will be delivered to you at your doorstep. But the facility is limited to Mumbai, Thane, Nasik, Surat and Pune. The bank would just charge Rs 10 + 12.24 per cent of service tax.

e. Prospects of Internet Banking

The Internet has levelled the playing field and afforded open access to customers in the global marketplace. Internet banking is a cost-effective delivery channel for financial institutions. Consumers are embracing the many benefits of Internet banking. Access to one's accounts at anytime and from any location via the World Wide Web is a convenience unknown a short time ago.

f. Convenience

This is the prime reason that why millions opt for an online banking account. They will be able to do all kinds of banking transactions within the comfort levels of their house. Checking the account balance, depositing money into the account, transferring cash to other similar accounts - the list of activities that one can perform with the aid of online banking platforms is immense.

g. Safe and Secure

Banks with online presence provide top security to protect their consumers. They use the latest encryption technology to prevent fraudulent activities such as phishing and identity theft. But while this is given, the consumers have to do their part as well by ensuring that they install the latest antivirus, anti-spam, and anti-spyware and firewall software installed in their computer.

h. Minimal Costs

Since the system is already well placed, the bank just needs to create an additional online account for the account holder. In fact, many banks encourage the users to create and operate online accounts with them. This will reduce the overall work load because the operations are fully computerized. As a good will gesture, these banks would increase the interest rates for the account holders. It is a win-win situation for both the parties.

Challenges in Internet Banking

a. Security Risk

The problem related to the security has become one of the major concerns for banks. A large group of customers refuses to opt for e-banking facilities due to uncertainty and security concerns. According to the IAMAI Report (2006), 43% of internet users are not using internet banking in India because of security concerns. So it's a big challenge for marketers and makes consumers satisfied regarding their security concerns, which may further increase the online banking use.

b. Privacy Risk

The risk of disclosing private information & fear of identity theft is one of the major factors that inhibit the consumers while opting for internet banking services. Most of the consumers believe that using online banking services make them vulnerable to identity theft.

c. The Trust Factor

Trust is the biggest hurdle to online banking for most of the customers. Conventional banking is preferred by the customers because of lack of trust on the online security. They have a perception that online transaction is risky due to which frauds can take place. While using e-banking facilities lot of questions arises in the mind of customers such as: Did transaction go through? Did I push the transfer button once or twice? Trust is among the significant factors which influence the customers' willingness to engage in a transaction with web merchants.

d. Customer Awareness

Awareness among consumers about the e-banking facilities and procedures is still at lower side in Indian scenario. Banks are not able to disseminate proper information about the use, benefits and facility of internet banking. Less awareness of new technologies and their benefits is among one of the most ranked barrier in the development of e-banking.

Opportunities to Internet Banking

Despite of various challenges that are prevailing in context with e-banking in India, the following opportunities are motivating the marketers for implementing e-banking:

a. Increasing Internet Users & Computer Literacy

To use internet banking it is very important or initial requirement that people should have knowledge about internet technology so that they can easily adopt the internet banking services. The fast increasing internet users in India can be a very big opportunity and banking industry should encase this opportunity to attract more internet users to adopt internet banking services.

b. Initiatives taken by government agencies for financial literacy

Financial literacy and education play a crucial role in financial inclusion, and inclusive growth. A study reported that there is significant impact of financial literacy on use of internet banking, If customers are not financially educated they will simply avoid using new online services and not change their traditional way of banking, thus banks will not be able to convert users into their new online banking strategies..

c. Competitive Advantage

The benefit of adopting e-banking provides a competitive advantage to the banks over other players. The implementation of e-banking is beneficial for bank in many ways as it reduces cost to banks, improves customer relation, increases the geographical reach of the bank, etc. The benefits of e- banking have become opportunities for the banks to manage their banking business in a better way.

Conclusion

The present paper gives an overview of the current scenario of prospects and challenges of Internet banking in the Indian context. The discussion about the challenges and opportunities provide insights to the marketers about the hurdles of internet banking. The marketers need to consider the factors such as security risk, privacy issue and trust while devising the strategies and marketing policies for internet banking. The use of information technology will not only reduce the costs of operation but also would be effective, easy to maintain, speedier and highly competitive. The challenges posed by the Internet banking are mostly of procedural nature, which can be easily counterbalanced by adopting suitable technological and security measures. There can be no doubt about the enormous potential and emancipated opportunities offered by advances in technology. However, there are prerequisites and preparations, which have to be made before the full benefits of the technology can be harvested.

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A STUDY ON THE ROLE OF INFORMATION TECHNOLOGY IN BANKING SECTOR WITH REFERENCE TO CHENNAI CITY

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Abstract

The study aims to evaluate and analyze the role of Information Technology in the banking sector. All nationalized banks in India has been growing without leaps and bounces and catering to the needs of various segments of the society. Information Technology has been making rapid changes in the form of ATM's, Mobile banking and Home banks etc to the customers. The evolution of Information Technology brought changes in new products, strong customer base, high-end services, structural changes in cost which have made a complete transformation in the banking sector structure. An attempt has been made in this paper to examine various innovative instruments that have been introduced by the banks in recent times. The concept of 24/7 working mode has been successfully initiated and running with the help of ATM's, Phone banking, Internet banking, Mobile banking and E-banking.

Keywords: Nationalized, Evolution, Phone Banking, ATM's, E-banking.

Introduction

Financial sector in general and banking industry in particular is the largest spender and beneficiary from information technology. This endeavours to relate the international trends in it with the Indian banking industry. Technology has brought a complete paradigm shift in the functioning of banks and delivery of banking services. Gone are the days when every banking transaction required a visit to the bank branch. The information technology (IT) available today is being leveraged in customer acquisitions, driving automation and process efficiency, delivering ease and efficiency to customers. The increased penetration and impact on the scale of business can be judged from metrics such as deposit and credit per account, which according to the RBI data was INR 6,412 and INR 20, 757 in 1992 and INR19, 898 and INR84, 618 in 2000 — these metrics increased to INR59, 217 and INR258, 751 in 2009, respectively, approximately thrice the levels in 2000 and 10 times the levels in 1992.

Customers are well versed in operating the technology at their fingertips, hence we have to more precised in introducing and adapting the changing technology. The major investment areas are portal development using technology that provides as structured data analysis and reporting especially in commercial banking. Predicting where the market is focusing towards, and how the technology changing, competitions in terms of security, regulatory and compliance requirements present challenges. With these variations in the level of information technology in Indian banks, it is useful to take account of the trends in Information technology internationally as also to see the comparative position with Indian banks. The present article starts with the banks perception when they get into IT up gradation. All the trends in IT sector are then discussed to see their relevance to the status of Indian banks.

Objectives of the Study

- To study the current scenario in the Indian Banking Industry.
- To highlight various challenges faced by banks in the recent trends.
- To study the role of Information Technology in Indian Banking Industry.

Sample Design: A survey was conducted among 60 customers and 30 front line bank personnel from three banks in Chennai City (SBI, ICICI, AXIS).

Data Collection: The survey was conducted to collect both Qualitative and Quantitative data with regard to role of Information Technology in the Banks.

- **Primary Data:** The primary data for the present study was collected through two different sets of structured questionnaire one for bank customers and the other one for banks staff.
- **Secondary Data:** The secondary data collection in the form of published resources such as information from relevant books, magazines, journals, websites etc.

Review of Literature

Shastri R.V, (March, 2003) "Recent trends in Banking Industry" IT emergence, Chartered Financial Analyst, (pp 45-56) in this article stated that liberalization policy and intense competition keeps every banker on his toes. Implementation of Information Technology (IT) helps for maintaining proper accounts especially in decision making process. He also stated that facilities like ATM, anywhere banking, Internet and mobile banking have imported customer service which in turn helps for better customer relations management. He also explained the challenges faced by banks because of IT implementation like employment problem and security concerns. He suggested that the customer delight is the primary goal of all future IT initiatives.

Arora (2003) highlighted the significance of bank transformation. Technology has a definitive role in facilitating transactions in the banking sector and the impact of technology implementation has resulted in the introduction of new products and services by various banks in India.

Information Technology in Banking Industry: In the mid of 80's the software packages for banks were limited while computerizing the branches, but in the early 90's TBA(Total Branch Automation) installed in due to the drop in hardware prices, low cost and inexpensive high-end powered Personal computers and services. In the middle of late 90's observed a total twister of financial reforms, which coupled the globalization by drastic in information technologies like Internet, Mobiles/Cell phones etc. Safe for maintaining public money transfer, drafts issuing, exploring of investments and opportunities. Indian banking industry, today is in the midst of an IT revolution. Banks are transforming towards the up gradation of latest information technologies to cope up with the emerging growth and survival. For the strong customer base and to adopt to the dynamic shift in the market, they formulate more precised flexi structure and respond quickly. Cost cutting and communicating effectively to the customer is viewed as an instrument through the role of information technology.

Following are the innovative services offered by the industry in the recent past:

- Electronic Payment Services - E cheques
- Real Time Gross Settlements (RTGS)
- Credit/Debit Cards
- Automatic Teller Machine (ATM)
- Electronic Fund Transfer (EFT)
- Electronic Clearing Service (ECS)
- Phone Banking
- Internet Banking

Survey on Socio-Economic Profile of Respondent

Respondents using ATM facility

The table given below provides the number of respondents who have an ATM facility.

Table 1 Distribution of Respondents using ATM facility

Source: Analyzed from Primary Data.

S.No	Usage	No. of Respondents	%
1	Yes	38	63.33
2	No	22	36.67
	Total	60	100

The above table reveals that out of 60 respondent only 63.33% use the ATM facility while the remaining 36.67% do not have ATM facility. Thus it is concluded that a majority of the respondents have ATM facility.

Usage of e-banking facility by the Respondents

This Table provides the usage of e-banking facility by the Respondents.

Table 2 Distribution of usage of e-banking facility by the Respondents

Source: Analyzed from Primary Data.

S.No	Usage	No. of Respondents	%
1	Yes	24	40
2	No	36	60
	Total	60	100

The above table reveals that 60% of the respondents is not using the E-banking facilities while the remaining 40% of the respondents use the facilities. It is concluded that most of the customers are either not using the E-banking facility of it is not available.

Usage of credit card facility by the Respondents

The below table provides the usage of e banking facility by the Respondents.

Table 3 Distribution of usage of credit/debit card facility by the Respondents

Source: Analyzed from Primary Data.

S. No	Usage	No. of Respondents	%
1	Yes	34	56.67
2	No	26	43.33
	Total	60	100

The above table reveals that, a highest of 56.67% of the respondents is using the Credit/Debit card facility while the remaining 43.33% of the respondents are not using this facility. From the analysis it is concluded that most of the respondents are using the credit/debit

card facility.

Gender wise usage of Mobile/Phone Banking

The below table provides the usage of Mobile /Phone banking by the Respondents according to gender wise.

Table 4 Distribution of gender wise usage of Mobile/Phone Banking by the Respondents

Source: Analyzed from Primary Data.

S. No	Gender	Usage	No. of Respondents	%
1	Male	Yes	28	46.67
		No	12	20
2	Female	Yes	9	15
		No	11	18.33
	Total		60	100

The above table reveals that 46.67% of male respondents use mobile/phone banking whereas 15% of female respondents use mobile/phone banking. It is concluded that male respondents use this facility than the females.

Findings

- I have research that majority of the respondents use ATM facility.
- I found that less percentage of the respondents using E-banking.
- Evidence suggests that highest percentage of the respondents using credit/debit card facility.
- I even found that male respondents use mobile/phone banking than the females.

Future Revolution

Technology has convinced everyone today and the key to hold the banking future. Without revolution of IT this achievement is not possible in any industry especially in banking. The key highlight is banks have to understand and adopt to the changing scenario and figure out the suitable start-up point for the change. It is more prevalence more in metros and urban areas with a rapid pace. More and more programs and software in regional languages could be introduced to attract more and more people from the rural segments also.

Conclusion

The banking today is re-defined and re-engineered with the use of Information Technology and it is sure to change the pace of banking to the next few years. Thus, there is a paradigm shift from the seller's market to buyer's market in the industry and finally it affected at the bankers level to change their approach from "conventional banking to convenience banking" and "mass banking to class banking". The strength of Indian banking lie in withering storms and rising up to the expectations from all the quarters-catching up with all the global trends is a matter of time. The shift has also increased the degree of accessibility of a common man.

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INDIAN BANKING INDUSTRY: CHALLENGES AND OPPORTUNITIES

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Abstract

India is the largest economy in the world having more than 120 crore population. Financial sector plays an important role in the economic development of a country. Banking is the lifeline of an economy. A strong and healthy banking system is important requirement for economic growth. The Indian banking sector is no exception. In this paper an attempt has been made to identify the general sentiments, challenges and opportunities for the Indian Banking Industry.

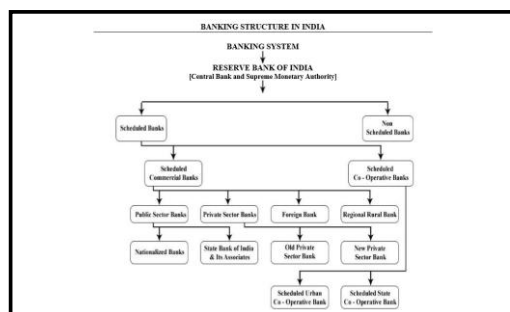
This article which is divided into three parts explains the challenges and opportunities faced by the Indian Banking Sectors. First part includes the introduction and structure of Indian banking industry. The second part discusses the various challenges and opportunities faced by Indian banking industry with problems and prospects of banking in India. Third part concludes that urgent emphasis is required on the Indian banking product and marketing strategies in order to get sustainable competitive edge over the intense competition from national and global banks.

Keywords: E-Banking, Information Technology, Internet Banking, India, Economic reforms, GDP, Indian Banks Rural Market, Risk Management, Global Banking, Employee and Customer Services

Introduction

A bank is a monetary institution that provides banking and other financial services to their customers. A bank is generally understood as an institution which provides fundamental banking services such as accepting deposits and providing loans. In this paper an attempt has been made to review various challenges which are likely to be faced by Indian banking industry economy rolling. The Banks are the main participants of the financial system in India.

Indian Banking Structure



Challenges in Banking Sector

There has been considerable widening and deepening of the Indian financial system in the recent years. While operating in this highly demanding environment, the banking system is exposed to various risks & challenges few of them are discussed as under

Improving Risk Management System

RBI had issued guidelines on asset liability management and Risk Management Systems in Banks in 1999 and Guidance Notes on Credit Risk Management and Market Risk Management in October 2002 and the Guidance note on Operational Risk Management in 2005. Though Basel II focuses significantly on risks its implementation cannot be seen as an end in itself. The current business environment demands an integrated approach to risk management. It is no longer sufficient to manage each Risk Independently. Banks in India are moving from the individual segment system to an enterprise wide Risk Management System. Banks would be required to allocate significant resources towards this objective over the next few years.

Rural Coverage

Indian local banks specially state bank groups having a good coverage and many branches in rural areas. But that is quite lacking technical enhancement.

Technological Problems

That is true that Indian banks were already started computerized workings and so many other technological up gradation done but is this sufficient. In metro cities Indian local banks are having good comparable technology but that cannot be supported and comparable by the whole network of other cities and village branches.

Corporate Governance

Banks not only accept and deploy large amount of uncollateralized public funds in fiduciary capacity, but they also leverage such funds through credit creation. Banks are also important for smooth functioning of the payment system. Profit motive cannot be the sole criterion for business decisions. It is a significant challenge to banks where the priorities and incentives might not be well balanced by the operation of sound principles of Corporate Governance.

Customer Services

There are concerns in regard to the Banking practices that tend to exclude vast sections of population, in particular pensioners, self employed and those employed in unorganized sector. Banks are expected to oblige to provide Banking services to all segments of the population, on equitable basis. Further, the consumers interests are at times not accorded full protection and their grievances are not properly attended to by Banks.

Branch Banking

Traditionally Banks have been looking to expansion of their Branch Network to increase their Business. The new private sector banks as well as the foreign banks have been able to achieve business expansion through other means. Banks are examining the potential benefits that may accrue by tapping the agency arrangement route and the outsourcing route. Hence they have to put in place appropriate strategies and systems for managing these new risks.

Competition

With the ever increasing pace and extent of globalization of the Indian economy and the systematic opening up of the Indian Banking System to global competition, banks need to equip themselves to operate in the increasingly competitive Environment. This will make it imperative for Banks to enhance their systems and procedures to international standards and also simultaneously fortify their financial positions.

Transparency and Disclosures

In order to bring about meaningful disclosure of the true financial position of banks to enable the users of financial statements to study and have a meaningful comparison of their positions, a series of measures were initiated by RBI. Banks are thus required to formulate a formal disclosure policy that addresses the banks' approach for determining what disclosures it will make and the internal controls over the disclosure process.

Known Your Customer Guidelines

The guidelines were revisited in the context of the recommendations made by the financial action task force on Anti Money Laundering Standards and on Combating Financing of Terrorism. Compliance with these standards both by the banks/financial institutions and the country has become necessary for international financial relationships.

Management of Risks

The rising competition increases the competitiveness among banks. But, existing global banking scenario is seriously posing threats for Indian Banking Industry. We have already witnessed the bankruptcy of some foreign banks. Wolgast, (2001) studied the merger and acquisition activity among financial firms.

Global Banking

It is fundamentally and practically impossible for any nation to exclude itself from the world economy. If we look at the Indian Banking Industry, then we find that there are 36 foreign banks operating in India, which becomes a major challenge for Nationalized and private sector banks. These foreign banks are large in size, technically advanced and having a presence in the global market, which gives more and better options and services to Indian traders.

Financial inclusion

It has become an essential in today's business environment. Whatever is produced by business houses that have to be under the test out from various perspectives like environmental concerns, corporate governance, social and ethical issues. RBI has initiated several measures to achieve greater financial inclusion, such as facilitating no-frills accounts and GCCs for small deposits and credit.

High Transaction Costs

A major concern before the banking industry is the high transaction cost of carrying non-performing assets in their books. The growth led to strains in the operational efficiency of banks and the accumulation of nonperforming assets (NPA_s) in their loan portfolios.

Employees' Retention

The diminishing employee morale results in decreased revenue. Due to the intrinsically close ties between staff and clients, losing those employees completely can mean the loss of valuable customer relationships. There tail banking industry is concerned about employee retention from all levels: from tellers to executives to customer service council because the competition is always moving in to hire them away.

Conclusion

At the start of 2014, only 2 per cent of banking payments went through the electronic system in the country. Today, mobility and customer convenience are viewed as the primary factors of growth and banks are constantly exploring new technology, with terms such as mobile solutions and cloud computing being used with greater regularity. The competition from global banks and technological innovation has compelled the banks to rethink their policies and strategies. Different products provided by foreign banks to Indian customers have forced the Indian banks to diversify and upgrade themselves so as to compete and survive in the market.

CORE BANKING AND ITS APPLICATION

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Abstract

In today's environment every field has an technological advancement which leads to quick and easy accomplishment of the task. Banking Industry has gone through various phases of mechanization which lead for total branch automation. Core banking is a banking services provided by a group of networked bank branches where customers may access their bank account and perform their basic transactions from any of their member branch offices. Core systems modernization has allowed the Banks to centralize computer processing and operations functions, offer new banking products to all the citizens of India, reverse a trend of customer attrition, and consolidate its affiliate banks. Additionally, the bank can now further expand its product offerings and improve customer services

Keywords: Core banking, modernization

Introduction

In today's environment every field has an technological advancement which leads to quick and easy accomplishment of the task. Banking Industry has gone through various phases of mechanization which lead for total branch automation. Core banking is a banking services provided by a group of networked bank branches where customers may access their bank account and perform their basic transactions from any of their member branch offices.

Core banking is a banking services provided by a group of networked bank, where customers can access their bank account and perform their basic transactions from any of the member branch. Core banking is often related through retail banking and banks treat their retail customers as their core banking customers. Businesses are usually managed via the Corporate banking division of the institution. Core banking covers basic depositing and lending of money. Core banking has historically meant the critical systems that provide the basic account management features and information about customers and account holdings

Most of the banks use core banking applications to carry their operations. CORE stands for "centralized online real-time environment". It means that the entire bank's branches access applications from their centralized datacenters. The deposits made by the customers are reflected immediately on the bank's servers and they can withdraw the deposited money from any of the bank's branches throughout the world. These applications also have the potential to address the requirements of corporate customers, by providing a complete banking solution. In earlier days a it used to take at least a day for a transaction to reflect in the account because each branch had their local servers, and the data from the server in each branch was sent in a batch to the servers in the datacenter only at the end of the day . Normal core banking functions will include deposit accounts, loans, mortgages and payments. Banks make theses services available across multiple channels like ATMs, Internet banking, and branches.

Components of Core Banking

- Software
- Hardware
- Data Centre / Disaster Recovery Centre

- Connectivity devices
- Connectivity service providers
- Security equipments
- Uninterrupted power supply arrangements
- Anti-virus / Fire-walls

Banking Software –Selection

- From when the vendor is in the field.
- Who are the promoters.
- Whether the software is really ABB (Any Branch Banking –i.e. Core Banking) or TBA (Total Branch Automation).
- Present installations in ABB as well as TBA.
- What are optional modules ready.
- Database (Oracle / DB2/any other)
- Warranty period.
- Annual Maintainace Contract –commencement and charges.
- Organization Certification –CMM level.
- If software audited? If yes, by whom and when.
- ISO certification. If yes, exactly on which area.
- ATM switch

Selection of Hardware

- Whether branded or unbranded.
- Warranty –one year or three year.
- Scope of warranty.
- Whether of exact need or spare capacity. If spare capacity considered is really required.
- Cost.
- Support.
- AMC.

Connectivity Devices

- Switch –connecting the computer to router.
- Router –connecting switch to connectivity channel.
- Lease lines –connectivity lines given by BSNL / MTNL.
- ISDN lines –fall back lines taken from BSNL / MTNL.
- Wireless communication systems.

Connectivity Service Providers

- MTNL
- BSNL
- private service providers on wireless method

Security Equipments

- Restricted entry to I. T. Dept., Data Centre and Disaster Recovery Centre
- Temperature control with hooters

- Fire alarms
- Fire extinguishers
- Rodent control
- Water leakage / seepage detection

Advantages of Core Banking

Centralized Accounting: All the bank transactions have an direct impact on the General Ledger and Profit and Loss Account..Through this we are able to know the real time total picture of the financial position and situation of the bank..This helps to take appropriate valuable decision for financial management, a very significant and dynamic task in today's banking.

Centralized Product Control & Monitoring: Centralization helps in better product analysis, monitoring and rollout. Aspects like interest rate modifications, product modification and interest application can be done centrally from one place for all the branches. Bank can promptly take action to market scenario and customer needs. This gives competitive edge to the bank.

Introduction of Technology Based Services: Service channels such as ATM, either on-site or off-site, can be started. Cheque Deposit Machines (CDM) can be installed in such a way that machine are in WAN connectivity and can allow any customer to deposit the cheque for collection at any branch. Cheque book printing machine can be installed at central location to give personalized cheque books. Such machine in WAN connectivity can receive command from any branch.

Centralized Customer Account Management: Any customer can become the customer of the bank rather than of a branch. With unique ID / Account Number the accounts of the customers can be viewed centrally by the bank. Such as, customer profile, details of products and services availed by him and customer behavior towards the business of the bank can be well understood. Such customers view gives the bank an opportunity to decide directions for business development and marketing strategies.

Centralized Reporting: Presence of centralized data constantly live up-dated at any time ensures comprehensive report / statement generation. This tremendously helps in decision making as well as submission to various authorities. Operational efficiency of the bank gets increased due to quick report generation for bank as a whole.

Centralized System Administration: Centralized system / I. T. administration enhances system security and user management. In TBA mode man-power for I. T. administration is required at each branch. But in core banking it is required only at one place. Thus reduction in man-power need and cost. Due to single point resource available I. T. manpower is utilized properly.

Advantages to Credit Department: Reduced credit processing time for existing loan accounts as the Credit Department gets information handy. For processing of new loan accounts the information on product is available that facilitates proper decision. Real time credit tracking by setting alerts about delays, deviations, penalties etc. Corrective measures in credit portfolio can be quickly taken due to credit portfolio analysis.

Advantages to Accounts Department: Centralized real time General Ledger and Profit and Loss Account almost eliminates accounting work. Greatly reduces paper work, inward communication needs and work of tallying. Deadlines of statutory compliance and submissions are met in time. Balance sheet of the bank available at any day, any hour, any moment. Accounts Department can concentrate on policy, compliance and reporting issues.

Advantages to I. T. Department: I. T. Department becomes the focused entity and back-bone of the operations of the bank. Central data management and application reduces logistical problems and reaction time for system changes and/or troubleshooting. Parameter settings, interest application and such other works being done at one place avoid chances of otherwise repetitive mistakes at different branches and then load on I. T. Dept. for rectification work.

Advantages to Customers: Customer can operate his account from any of the branch of the bank. More service channels can be made available to the customer. Customer gets immediate credit if the transaction is between the branches of the bank. Even extension counters can provide all services to the customer. Customer gets full attention and service satisfaction at the branches as the branches are freed from all back office functions, clearing functions and almost all accounting functions. Customer can get SMS alerts on his mobile or e-mail alerts through net for transaction taking place in his account. This gives him comfort and security.

Advantages to Branch functionality: With reduced work at the branches they can focus on development of business, customer service and attendance and meaningful liaison with customer for getting new business. Since customer needs are known with proper analysis they can be well attended even before their demands that boosts the image of bank as customer savvy. This increases business and thereby profit.

Threats and Risks of Core Banking

- Total dependency on technology
- Any failure on technical ground can halt the working with uncertainty about restoring normalcy
- Stoppage of work has adverse effect on bank's image and reputation
- Technical person/s leaving the bank poses serious problem
- If not mitigated by generating profit out of benefits of core banking the recurring costs are heavy

Conclusion

Banks achievement demonstrates that attention to critical factors is crucial in implementing new core systems. The bank's senior management commitment, business line involvement, project team staffing and empowerment, and extensive employee training were all key contributors to the success of the project. Management also recognized a proven systems integrator that possessed in-depth expertise in both business and technology. Core systems modernization has allowed the Banks to centralize computer processing and operations functions, offer new banking products to all the citizens of India, reverse a trend of customer attrition, and consolidate its affiliate banks. Additionally, the bank can now further expand its product offerings and improve customer services.

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TECHNOLOGICAL DEVELOPMENT IN PUBLIC SECTOR BANK

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Introduction

A bank is an institution, which deals with money and credit. Thus bank is an intermediary which handles other people's money both for their advantage and to its own profit. But bank is not merely a trader in money but also important Manufactures of money in other words, a bank is a factory of credit.

Definition of Banking

"Banking is defined as accepting for the purpose of lending or investment of deposits of money from the public, repayable on demand or otherwise and withdrawable by cheque, draft, order or otherwise".

- The Banking Regulations Act, 1949.

The Reserve Bank of India Act was passed in 1934, to establish the Reserve Bank of India, which is the guardian of the banking system in India. As the Central Bank of the Country, the Reserve Bank of India Act contains provisions concerning the commercial banks. The Act provides for the classification of banks into scheduled banks and non-scheduled banks. Accordingly, a scheduled banks in one which is included in the second schedule to the Reserve Bank of India Act 1934.

As per the conditions laid down in the Reserve Bank of India Act, 1934, a bank satisfying the following conditions can be in the second schedule.

- It must have a paid up capital and reserves of not less than Rupees to lakhs.
- It does not conduct its affairs in the manner detrimental to the interest of the depositors, and
- It must be a State Cooperative bank or a company defined in the Companies Act, 1956, or an institution notified by the Central Government in this behalf or a corporation or a company incorporated by or under any Law in force outside India.

Banking Regulation Act, 1949

The Law governing the working and functions of banks in India was passed in 1949 and named as the Banking Regulation Act, 1949. Before passing this Act, the banking companies were governed by the Indian Companies were governed by the Indian companies Act 1913. Since banking as a business has itsowe distractive features, it was felt necessary to have to separate Act concerning only the banking companies. Hence, an act was passed in 1949, regulating the banking companies, in order to cover the cooperative banks also, the name of the Act was changed as the Banking Regulation Act 1949.

Invasion of Technology into Banks

Technology oriented banking has become possible mainly because of the expansion in satellite telecommunication networks coupled with the availability of mini-computers and processors and a wide variety of processing, storage and retrieval equipment and tools at any location. Technology in banking has been used in a number of ways, mainly;

- a. To manage the accounts of very large number of customers
- b. To bring about cost effectiveness in handling payments
- c. To eliminate the unstraints of customers having to transact business during limited banking hours at the branch where the accounts in maintained
- d. To introduce new services.

ATM Card / ATM'S

ATM / Debit card issue actively is, generally, centralized as it is a highly security oriented activity. They are specially manufactured and contain to international standards. A customer applies for his card at his branch and the card upon issue is activated through a personal Identification number (PIN). The customer is free to change his PIN whenever he wants through a separate option given in the ATM itself. When a customer wishes to avail the services of an ATM, he goes to the nearest convenient location where an ATM is installed. The customer comes in front of an ATM screen, which generally welcome him and request him to put the card into a slot. Once the card is inserted, the ATM pulls the card and subsequently guide the customer through the menu given instructions. In case of cash withdrawal, the customer selects the option for cash withdrawal the ATM asks for the amount to be withdrawn. After successful authorization, ATM starts picking up the cash from the dispenser and throws it on to the cash dispenser tray. After the transaction, the ATM gives a small printout of the transactions concluded for the customer's record likewise, cash deposit, change of PIN, Balance enquiry, view of account statement, printout of mini statement are also possible through an ATM.

Internet Banking Services

Internet banking is a service provided by banks to their customers by allotting them a login ID and two passwords – one for their login and another for transactions. This service gives a list of facilities to the customers. They can avail these facilities by sitting in the comfort of their residence and / or office itself. Their time, energy and cost for visiting their bank branch are thus obviated. The customer can even go to the nearest cyber café and do the desired transactions. The following transactions are possible through internet banking. Balance enquiry, funds transfer between accounts, requests and intimation, payments of utility bills like electricity, water telephone etc. statement of accounts, request for issue of cheque books, access to information regarding various formalities involved in opening of accounts.

Mobile / SMS Banking Services

A new revolution in the realm of e-banking is the emergence of mobile banking, online banking is now moving towards the mobile world, giving anybody with a mobile phone access to real-time banking services, regardless of their location. But, there is much more mobile banking than online banking. It presents a new way to pick up information and interact with the banker's to carry out the relevant business. The potential is learnt less and is expected to be a big success. Banking and paying for travel and even tickets is also expected to be a growth area. According to the system, customer can access account details on mobile using the short messaging system (SMS) technology where select data is pushed to the mobile device. This is a very flexible way of transacting banking business. SMS banking is a step further to Tele banking in this, the customer sends a pre-defined short message – SMS, from his mobile phone which is registered with the bank, to a designated mobile phone number for his balance enquiry or details of lost few transactions.

National Electronic Funds Transfer (NEFT)

NEFT system is a nationwide funds transfer system to facilitate transfer of funds from any bank branch to any other bank branch. The system was the concept of centralized accounting system and the banks accounts that are sending or receiving the funds transfer instruction, gets operated at one centre. The individual branches participating in NEFT could be located anywhere across the country. The NEFT settlements are done in 6 batches on weekdays and in 3 batches on Saturdays at Reserve Bank of India. The beneficiary gets the credit on the same day or the next day depending upon the time of settlement at the RBI.

Real Time Gross Settlement (RTGS)

The acronym "RTGS" stands for Real time Gross settlement. RTGS is a fund transfer for mechanism whereby transfer of money taken place from one bank to another on a 'real time' and on 'gross' basis. This is the fastest possible money transfer system through the banking channel settlement in 'real time' reason payment instructions are not subjected to any waiting period. The transaction are settled as soon as they are processed. Gross Settlement means the transaction is settled on one to one basis without bunching with any other transaction considering that money transfer takes place in the books of RBI, the payment is taken as final and irrevocable. The RTGS service window for customer transaction is available from 9.00 hours to 16.00 hours on week days and from 9.00 hrs to 12.00 noon on Saturday (i.e. to accept the customer transactions for settlement at RBI. The RTGS system is provisionally for large value transactions under normal circumstances the beneficiary branches are expected to receive the funds in real time as soon as funds are transferred by the remitting bank. The beneficiary bank has to credit the beneficiary account within to hours of receiving the funds transfer message.

Centralized and Core Banking Solutions in Banks

Core banking or centralized banking solution appear to be a more viable option to overcome all the issue of distributed data based, lack of Management information system, etc. In this set up a high and server is provided at a central location, say data centres which would act as centralized data processing centre. The entire data base of customers of the entire bank is maintained at the data centre which would also have a disaster recovery site at a different location so as to ensure continuity of services. In case any problems with primary data centre, as data is becoming an extremely initial asset, storing of data by adequate security as on unavoidable and indispensable requirements. This has prompted a new concept of setting up data centres. The data centres are highly secured places with state of the art firefighting uninterrupted and related power supply and other support facilities, where corporates can place their critical equipment including high end servers ATM switches etc. Generally, these sites are fully equipped with networking infrastructure both for LAN and WAN connectivity so that the initiation period of projects get reduced to large extent. The branches are connected to this centralized data centre through a reliable, secured and redundant network. The records at centralized server for each such transaction would get updated on real time basis so that the data started at the centralized server would be connecting at any point of time.

Conclusion

The competition in the banking sector after 1991 has compelled banks to change their outlook and new more interest in matters concerning quality (i.e.) quality with respect to production and quality with respect to services and mandatory to adopt technological development aspects in all ways. Specifically service quality is becoming more crucial for banks to maintain their market shares. This has also become

an important factor among their customer in retail banking. Success and survival in the banking sector is directly becoming related to provisions of high service quality to customer which in turn not only satisfies customers improves loyalty, increases market share and finally leads to profitability. Services are tangible but quality on the other hand is differentiable. They stem gross the expectation of the customers. It therefore, becomes an impressive for banks to identify customers expectations given priority to them and incorporate these expectations into their service process for improving quality in all aspects.

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A STUDY ABOUT CHALLENGES AND OPPORTUNITIES OF E-BANKING

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Abstract

Banking is the lifeline of an economy. It is important to have strong and healthy banking system for economic growth of any country. Today IT revolution is observing Indian banking industry. Modernized banking organizations are implemented. This implementation gives benefits to both the both i.e. consumers as well as banks. Considering the benefits, the banks all over the globe have implemented the internet banking and banking organizations in India are no exception. The increasing competition between the banks has led to the increasing total banking automation in the Indian banking industry. Electronic Banking is a generic term encompassing internet banking, telephone banking, mobile banking etc. The objective of the present paper is to examine and analyze the challenges and opportunities to Internet Banking in India.

Keywords: E-Banking, Information Technology, Internet Banking.

Introduction

In today's organizations information technology very important tool to develop business. After globalization,, liberalization , privatization banks are facing high competition. IT has introduced new business paradigm. It is progressively playing a important role in improving the services in the banking industry. Indian banking industry has witnessed a incredible developments due to sweeping changes that are taking place in the information technology. Internet Banking means to a system allowing individual customers to perform banking activities at off-bank sites such as office, home, and other locations through internet based secured networks. Internet or online banking through traditional banks enable customers to perform all routine transactions, such as account transfers, , bill payments balance inquiries and stop-payment requests, and some even credit card applications and offer online loan. Internet banking is a web-based service that enables the banks authorized customers to access their account information. It permits the customers to log on to the banks website with the help of bank's issued identification and personal identification number (PIN). The banking system confirms the user and provides access to the requested services, the range of products and service offered by each bank on the internet differs widely in their content. The banking industry can kill two birds with one stone that is with help of technology. Tremendous progress took place in the field of technology which has reduced the world to a global village and it has brought remarkable changes in the banking industry.

Objectives of the Study

- To study the current status of financial innovations in Indian banking sector.
- To identify few study relevant to E- banking.
- To study the opportunities available in E-banking.
- To study the challenges faced in E-banking.

Internet Banking – Meaning

Electronic banking is defined by to an application of the Internet that allows consumers to can dial into bank networks or their websites, by using their own mobiles, computers and telephones and to get

a host of banking services directly on their office or home PCs. Electronic banking is the signal of the future. It provides massive advantages to consumers in terms of the cost and easy of transactions. But it also have new challenges for country authorities in term of supervising and regulating the financial system and in designing and implementing various economic development policy. Internet banking has been around for some time in the form of automatic teller machines and telephone transactions. More recently, it has been transformed by the Internet, a new delivery channel for banking services that benefits both banker and customer. Access is fast, easy, and available by 24by 7, wherever the customer's location banks can provide services more effectively and at considerably lower costs. Electronic banking also makes it easier for customers to evaluate banks' services and products, can increase competition among banks, and paves banks to penetrate new markets and thus expand their geographical reach. The unique features of Internet banking includes:

- It reduces the traditional geographical barriers as it could reach out to customers of different countries
- It has increases a new dimension to reduces the different kinds of risks traditionally associated with banking,
- Validity of electronic contract, Security of banking transactions, customers' privacy, etc., which have all along been concerns of both bankers and supervisors have assumed different dimensions given that Internet is a public domain, not subject to control by any single authority or group of users.
- It pretense a strategic risk of loss of business to the banks who do not respond in time to this new technology, being the efficient and cost effective delivery.

Review of Literature

Vikas Chauhan and vipin Choudhary (2015)¹ The present paper attempts to understand the concept of internet banking as well as study the benefit of internet banking from perspective of consumers as Well as banks. Further, this paper discusses the challenges and opportunities associated with the internet banking in Indian context. The discussion Concludes that Concept of Internet banking Is slowly gaining Acceptance in Indian Scenario and Efforts are Being made by government Agencies to make It more Popular among consumers.

Balwinder Singh and Pooja Malhotra (2014)² this paper presents data, drawn from a survey of commercial banks websites, on the number of commercial banks that offer Internet banking and on the products and services they offer. It investigates the profile of commercial banks that offer Internet banking, using univariate statistical analysis, relative to other commercial banks with respect to profitability, cost efficiency, and other characteristics. By the end of first quarter, 2004, differences between Internet and non-Internet banks had begun to emerge in funding, in sources of income and expenditures and in measures of performance. It was also found that the profitability and offering of Internet banking does not have any significant correlation.

Jayshree Chavan (2013)³ he discusses some challenges in an emerging economy. Paper concluded that one of the benefits that banks experience when using E_banking is increased customer satisfaction. This due to that customers may access their accounts whenever, from anywhere, and they get involved more, this creating relationships with banks. Banks should provide their customers with convenience, meaning offering service through several distribution channels (ATM, Internet, physical branches) and have more functions available online.

Opportunities of E-Banking in India

Ongoing digital drive in India, it expected that the number of users opting for online banking is to reach 150 million mark by 2020, from the current 45 million active urban online banking users, according to a report drafted by Facebook and The Boston Consulting Group (BCG)⁴. this report titled “ENCASHING ON DIGITAL: Financial Services in 2020”, the two firms have depicted the increasing influence of digital in banking and financial services and the transformation necessary to make the most of this revolution. “India could not be more ready for a digital revolution in financial services – with government interventions on one hand and growing consumer awareness on the other. Digital India has the potential of reducing cost of acquisition and cost of servicing to 1/10th it if the adoption in Wide scale. It significantly progress customer level profitability and can increase to retail profit pool by \$3 – 3.5 billion by 2020,” said Amit Kumar, Partner and Managing Director, The Boston Consulting Group, India.

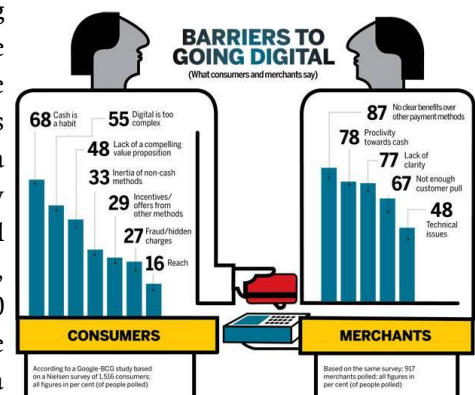
This study also said that, India is in the midst of a digital revolution, with Internet users going beyond just search and social networking and moving to more mature activities like online shopping and banking. Nearly 70 percent urban internet users are digitally influenced during financial product purchase. In terms of digital adoption, financial services is already much larger than other categories like consumer electronics or travel.

“As more and more customers access the internet on their mobile phones, there is a big opportunity for financial companies to generate a powerful digital experience that is intuitive and secure for their customers. The report confirms that consumers are leaning in towards digital adoption of financial services faster than previous estimates, and the time is now for the financial services industry to invest digital future.” To develop digital ecosystem, India is to setting up open architecture layers such as Aadhar, India Stack, Bharat Bill Payment System and GST.

Challenges of E-Banking The study of Boston Consulting Group (BCG) says that a in India still 68 percentage of the population is habituated to cash as a medium of payment while making online purchase. They also feel using cash keeps spending in check. The informal sector, which employs a majority of India's workforce, largely prefers cash. Technology entrepreneur says for e-payments to be successful, digital penetration has to be omnipresent. The underlying platform, the internet, should be available everywhere. Nearly 850 million Indians are not connected to the internet and the challenge is to take digital infrastructure to these people. India is have only seven per cent broadband penetration according to a white paper presented by the International Telecommunications Union (Thailand's reach is 36 per cent, Singapore's 98 per cent and Malaysia is at around 35 per cent).

It took a decade for 200 million people to get access to the internet; scaling it up to 500 million could just takes up to five years, according to policymakers and tech entrepreneurs. The complexity of digital payments, which impacts universal acceptance. Other hurdles include a lack of awareness and clarity regarding transferring money from an e-wallet to one's bank account, and fears of fraud and hidden fees.

The likelihood of fraud cannot be ruled out, especially after 3.6 million cards were compromised and had to be withdrawn after several cases were reported. There's also the perception of inferior technology and poor support infrastructure. The government Digital India programme is also lagging behind in it's



which aims to connect 2.5 lakh gram panchayats through optical fibre cable. Of these 97,480 panchayats were to be covered in Phase 1 by March 31, 2016. Deadline, to a new one was set for December 31, which too is likely to be missed. In the interim, short term solution using USSD (unstructured supplementary service data) helps transmit information through mobile channels, and can be used for transactions up to Rs 5,000.

Meanwhile, there is no comprehensive legislative framework to protect the consumer. "As more Indians go online, digital Indians need digital rights. Currently, consumers are unprotected". The IT and communications ministry has recommended some changes in the existing IT law to incorporate data security. The government is also considering a privacy law.

More than 50 percent of consumers are dissatisfied with their online banking and mobile experience largely because of fear of hidden charges, lack of trust, complicated information provided among others. This is also indicated by the very low downloads of mobile apps of financial institutions when compared with e-commerce apps.

Conclusion

Government should take effective measures to get customers to move to digital payment instruments. Incentives and offers always have an appeal; a simple user interface ensures a seamless customer experience. Further security, biometric authentication would eliminate the need for multiple user names and passwords. High frequency transactions must be brought under the ambit of digital payments to urge consumers to move in that direction.

Last but not the least, there is a need to build a transaction ecosystem for merchants, since the upstream supply chain also demands payments in cash. The fee structure should also be kept low to attract the unorganized retailer. They also need support, in the form of call centers or agent support, toll-free numbers and transparent processes in case of disputes and refunds to instill confidence.

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INTERNET BANKING SECTOR CHALLENGES AND OPPORTUNITIES IN INDIA

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Introduction

Advancement in technology provides fast innovative changes in people's routine life. The most significant recent technology development that drastically transformed the entire scenario is the use of internet facility in service delivery. A Number of people that are adapted this technological improvement for online transaction or an online shopping, is increasing tremendously. Gradually, more business organizations realized that it could be utilized to facilitate growth through its advantages of easy adoption in information and technology transfer.

The internet facility has transformed the business world in terms of managing business and Banking Sector. Although, technological advancements are happening everyday but not every advance has been welcomed and implemented by financial sector; but financial sector that enjoying advantages of this new mode of service delivery, has adapted the e-banking phenomenon from its introduction only. The online banking promotional activities of their products and services; but as the e-banking concept developed, banks have started enjoying its various other advantages, such as, reduced per transaction cost, enhanced customer service, raised long term returns by providing 'anytime anywhere' banking to the banking customers. Technological advancement specifically, in IT is always seen as the main source of changes taking place around the globe. The entire banking industry has entered into an unparalleled competitive form facilitated by new ICT infrastructure, because of universal and gradual development of ICT.

Advantages of Internet Banking

Now, banks can deeply analyze all the information gathered from bank customer interactions with the help of information technology. Therefore, to have effect Customer Relationship Management (CRM) system is becomes key issue in internet banking services. The effective CRM system enables banks to gain better customer intelligence, precision in customization and better- managed customer relationships through their virtual presence.

But from a business point of view, updating of technological systems it will help banking sectors to achieve and get more customers. As e-banking enables banks to transfer some of its transaction processing tasks directly to their banking customers. To enjoy these benefits of e-banking system, banks are encouraging their customers to adapt e-banking system and manage their own banking through ATMs and online banking. Technological innovations are having significant importance in human general and professional life. This era can safely be attributed as technology revolution. The quick expansion of information technology has imbibed into the lives of millions of people. Rapid technology advancements have introduced major changes in the worldwide economic and business atmosphere. Information technology developments in the banking sector have sped up communication and transactions for clients. Therefore, influencing factors to e-banking adoption in India are the prime concern for e-banking offering banks as well as for rule makers.

Benefits to Consumers

General consumers have been significantly affected in a positively by E-banking. Many of the ordinary tasks have now been fully automated resulting in greater ease and comfort. Customer's account is extremely accesses able with an online account.

A customer can withdraw can at any time through ATMs that are now widely available throughout the country. Besides withdrawing cash customers can also have mini banks statements, balance inquiry at these ATM. Through Internet Banking customer can operate his account while sitting in his office or home. There is no need to go to the bank in person for such matter. E banking has also greatly helped in payment of utility bill. Now there is no need to stand in long queues outside banks for his purpose. All services that are usually available from the local bank can be found on a single website. The Growth of credit card usage also owes greatly to E-banking. Now a customer can shop worldwide without any need of carrying paper money with him. Banks are available 24 hours a day, seven days a week and they are only a mouse click away.

Benefits to Banking Industry

The banking industry has also received numerous benefits due to growth of e-banking infrastructure. The growth of e-banking has greatly helped the banks in controlling their overheads and operating cost. Many repetitive and tedious tasks have now been fully automated resulting in greater efficiency, better time usage and enhanced control.

The rise of E-banking has made banks more competitive. It has also led to expansion of the banking industry, opening of new avenues for banking operations. Electronic banking has greatly helped the banking industry to reduce paper work, thus helping them to move the paper less environment. Electronic banking has also helped bank in proper documentation of their records and transactions. The reach and delivery capabilities of computer networks, such as the Internet, are far better than any branch network.

Benefits to General Economy

Electronic Banking as already stated has greatly serviced both the general public and the banking industry. This has resulted in the creation of a better enabling environment that supports growth, productivity and prosperity. Besides many tangible benefit in the form of reduction if cost, reduced delivery time, increased efficiency, reduced wastage, e-banking electronically controlled and thoroughly monitored environment discourage many illegal and illegitimate practices associated with banking industry like money laundering, frauds and embezzlements. Further E-banking has helped banks in better monitoring of their customer base. This it is a useful tool in the hand of the bank to device suitable commercial packages that are in conformity with customer needs. As e banking provide opportunity to the banking sector to enlarge their customer base, a consequence to increase the of volume of credit creation which results in better economic condition, Besides all this E-banking has also helped in the documentation of the economic activity of the masses.

Merits in Internet Banking

E-banking served so many benefits not only to the bank itself, but also to the society as a whole. E-banking made finance economically possible: (i) Lower operational costs of banks (ii) Automated process (iii) Accelerated credit decisions (iv) Lowered minimum loan size to be profitable.

Potentially lower margins: (i) Lower cost of entry (ii) Expanded financing reach (iii) Increased transparency. Expand reached through self-service: (i) Lower transaction cost (ii) Make some corporate services economically feasible for society (iii) Make anytime access to accounts and loan information possible.

Demerits in Internet Banking

Although e-banking system provides a numerous advantages to the customers but still prospecting e-banking users should identify its few disadvantages as well. Even after investing heavily in e-banking awareness campaign and offering so many benefits through e-banking system, and its lack in gaining trust factor among its customers.

1. **Impersonal:** Absence of face to face interaction makes it very impersonal. Thus, customers who are more comfortable in dealing with people in physical bank setting that provide those personalized services rather than mechanical interaction; e-banking is not a good option for them.
2. **Lack of trust:** Still many customers do not trust online mode of service especially for money related transactions. Users who are not seasoned in e-banking feel very uncomfortable as they have doubt regarding the correctness of the transaction done by them online. As they require some kind of proof of transaction as receipt, to verify their transactions.
3. **Difficult for first timers:** For the beginners, it appears as a complex mode of service as customer find it complicated to navigate through bank's website. While opening an account online, bank's website requires some of information and that seems time taking and inconvenient process to the first time users.

Risks in Internet Banking

Bank should maintain adequate leverage between the advantages and risks of e-banking. Although, marketing and advertising campaign initiated by banks are encouraging a number of customers to adapt e-banking, but for managing such a huge customer base banks need to prepare their internal system on prior basis. To have a deep understanding about the risks of e-banking system, it is categorized in various categories, so that bank can effectively design risk management strategies for e-banking. As now e-banking enabled banking beyond the geographical boundaries, banks have local as well as international customers to process their requests or solve their problems. Complexity of e-banking system has increased due to its close network that involves various service delivery mode offered by a bank and open network, such as internet facility that is subject to security and reputational risks. It also includes operational risk, legal & regulatory risks, systematic risks, credit risks, market risks and liquidity risks. To achieve efficiency in e-banking, banks should properly identify, manage and control the risks involved in it.

Challenges of E- Banking are as follows

1. Demand- side pressure due to increasing access to low cost electronic services.
2. Emergence of open standards for banking functionality
3. Global players in the fray.

Most online transactions involve disclosing up of the credit or debit card number. Hackers can very easily track down these numbers. They can thus enjoy the full benefits of the card without being an actual cardholder. Reserve Bank of India provided some guidelines on e-banking to protect interest of customers as well as of banks.

Conclusion

E-Banking has transformed not only the banking relationships but transformed the whole banking industry. The e- banking, therefore taken as a mandate by the banks rather than just an additional feature in most of the developed nations, as it is the economical medium to cater the banking customers. Today banking is not restricted to the traditional physical branch system, where banking staff need to be there personally for enabling banking transactions. But still there is strong requirement of customer- awareness regarding e- banking facility prevails in India and it can served through proper scanning and analysis of the market. Through e- banking, customers can process any banking transaction without even visiting bank branch at any time anywhere and this is known as "anywhere banking". Providing e- banking is no more considered as an additional feature of a banking institution, but now it is became an essential feature of a bank.

TECHNOLOGIES BASED ON MODERN BANKING SERVICES

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Introduction

Technologies are very important in the banking industries and its management developed and its easily handled, time keeping & saving for many purposes to them. In Banking sector today is a flourishing industry, it focused on technological innovation. Banks play an important and active role in the economic development of a country. Banking systems of any country needs to be effective, efficient and disciplined because it brings about a rapid growth in the various sectors of the economy. Liberalization brought several changes to Indian service industry. Technology is revolutionizing all areas of human endeavor and activity. It has now brought in E-banking, which is gradually replacing the traditional branch banking. Internet banking has emerged as the biggest focus and targetable area. The customers are able to choose their banker from a number of banks offering wide range of services and delivering quality service. The commercial banks in India are now becoming more market oriented and customer friendly. Internet banking is changing the banking industry and is having a significant impact on the banking relationship. Banking industry is fast growing with the use of technology in the form of ATMs, on-line banking, Telephone banking, Mobile banking etc., This growth has been strongly supported by the development in the field of technology, without which this could not have been possible. Besides it will change our lifestyle in coming years. Nowadays Banks have been providing a wide area range of services to satisfy the financial and non-financial needs of all types of customers from the smallest account holder to the largest company and in some cases of non-customers. The range of services offered differs from bank to bank depending mainly on the type and size of the bank. This paper describes the modern banking services need, impact, importance and benefits of modern banking services for the sustainable development.

Objectives of the Study

The objectives of the studies are:

1. To Identify Various need of modern banking services
2. To know the impact of technological banking services
3. To aware the importance with respect to modern banking services
4. To realize the benefits of modern banking services;

Methodology

Data's are collected and analyzed only secondary data Sources such as through Books, Journals, Magazines, Websites, Broachers, Newspapers and so on.

Needs of Modern Banking Services

The pace of development for the Indian banking industry has been tremendous over the past decade and the future growth of India's banking sector will remain high. India's financial services sector will be enjoying generally strong growth during coming years, driven by rising personal incomes, corporate

restructuring, financial sector liberalization and the growth of a more consumer-oriented, credit-oriented culture. The banks were finding it difficult to compete with the international banks in terms of the customer service without the use of the information technology and computers. The use of the modern innovation and computerization of the banking sector of India has increased many folds after the economic liberalization of 1991 as the country's banking sector has been exposed to the world's market.

Impact of Modern Banking Services

Technology has been one of the most important factors for the development of the nation. Information and communications are significant part in the field of technology which is used for accessing, processing, storage and dissemination of information electronically. Banking industries are rapidly growing with understanding the requirements of customer by offering technological services like ATMs, online banking, telephone banking, and mobile banking and so on. This growth has been strongly supported to the technologies development. With the development of information technology, the world has become a global village and it has brought a revolution in the banking industry. Bank customers are becoming very demanding and it is the extensive use of technology that enables banks to satisfy adequately the requirement of customers, holders & etc. Further the banking sector reforms and introduced (introduction) of the E-banking has made very structural changes in service quality, managerial decisions, operational performance, profitability and productivity of the banks. E-banking is one of the emerging trends in the banking and is playing a unique role in strengthening the banking sector and improving service quality. It has enabled the banks to handle the payments electronically and inter-bank settlement faster and in large volumes. Customers can view the accounts, get account statements, transfer funds, purchase drafts by just making a few key punches. Availability of ATMs and plastic cards, EFT, electronic clearing services, internet banking, mobile banking and phone banking to a large extent avoid customers going to branch premises and has provided a wider range of services to the customers.

Technological Based Modern Banking Services

Use of advanced technology has led to the shift from traditional banking methods to modern banking methods. Currently, the most common and useful technological based on banking methods are online banking, Mobile banking, Video banking, Telephone banking, ATMs, Plastic money and so on.

1. **Online Banking:** It empowers customers to conduct financial banking transactions on a secure website which can be operated by a retail, virtual bank, credit union or building society. It makes banking faster and easy. The following are transactional and non – transactional applications of online banking services.
 - **Transactional:** Bill payments and wire transfers to third parties Fund transfer between customer's transactional and savings account Sale and purchase of investments Applications and transactions for loans and enrollment repayments.
 - **Non-transactional:** Analyzing recent transactions, downloading bank statements, viewing paid Cheques, Financial Institution Administration Portfolio Management of multiple users at different authority levels Transaction approval processed.
2. **Video Banking:** It is used for conducting banking transactions or consultations through a remote video connection. It can be performed overall purpose in built banking transaction machines similarly to the Automated Teller Machines (ATM) or through bank branches enabled with video conferencing. Video banking improves the following banking activities: Customer authentication Cash and Cheque deposits, Cash and coin withdrawals, Account transfers, and bill payments Processing new accounts and loans Bank consultations and enquiries and so on.

3. **Mobile Banking:** Mobile banking is a system that allows customers of a financial institution to conduct a number of financial transactions through a mobile device such as mobile phone or personal digital assistant. It is used for performing through mobile device such as a Mobile Phone or Personal Digital Assistant (PDA). Banking activities such as: Balance checks, Account Details Portfolio management, Account transactions, Payments and investments, Credit applications and other transactions are available in the Mobile banking activities. It enables connection with customers throughout the customer life cycle in a much better way than before. Its objectives are the Building customer relationships, reducing cost and gaining revenue, Promotion of banking organization brand, Personalization of banking experience.
4. **Telephone Banking:** It is a bank service provided by financial institutions allowing its customers to conduct banking transactions over the telephone. Institutions which provide banking services exclusively over telephone are called Phone Banks. They use special technology to modernize the customer by providing bank and account related information over a telephone. The benefits of telephone banking are Automated phone answering system, Phone keypad response resources, Voice recognition capability & etc. the features of the telephone banking's are Account balance information List of latest transactions, Electronic bill payments, Funds transfer between customer accounts, Loan and account applications, Purchase and redemption of investments, Cheque book orders Debit or credit card replacements, requests as change of address and etc.

Conclusion

Today, banking is important role in our life for crediting & debiting for all purposes at the same time the Governments all are sanctioned and its profiles are interconnected to the banking such as Profile interconnecting & Linked (Aadhar Number, PAN Number, Personal Details & etc.), Taxis, Fund Transfers, Transactions, Opportunities, Schemes Money Sanctions to be through banking at uses technologically based on the Modern banking, Systematic banking & etc. The banks deployed to technology intensive solutions like enhancing core banking value, revamping the digital agenda, moving from information to insight, dealing with a changing risk regime, from cash to electronic modes of payment, grappling with financial inclusion, empowering employees and accelerating innovation. Banks have been changed in their operations and moved towards universal banking along with the increased usages are technological Method. Majority of banks are insisting on cashless and paperless payment modes. Today banking's are also known as innovative banking through internet. It has been emerged as a strategic resource for achieving higher efficiency, control of operations and reduction of cost by replacing paper based and labour intensive methods with automated processes thus leading to higher productivity, and profitability. Challenging business environment within the banking systems are create more innovation in the fields of product process & etc. Online banking is highly comfortable in our routine life. Infact this made our life simple and convenient and overall we are able to be enjoy quality service smartly. These technologies created efficiency and time saving methods of conducting business for people.

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ESPOUSAL OF GREEN BANKING – INDIAN SCENARIO

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Abstract

Green banking means promoting environment friendly practices and reducing carbon footprint from banking activities. This comes in many forms viz. using online banking instead of branch banking, paying bills online instead of mailing them, opening of commercial deposits and money market accounts in online banks etc. Green banking refers to the banking business conducted in such areas and in such a manner that helps the overall reduction of external carbon emission and internal carbon footprint. To aid the reduction of external carbon emission, banks should finance green technology and pollution reducing projects.

Keywords: GHG, EIA, ARS, GCC.

Objectives of the Study

1. To trace the practice of green banking in the selective Indian banks and examine the strategies of green banking adopted in India.
2. To evaluate various benefits and financial products involved in green banking.

Green Banking Practices – Indian Scenario

Green banking refers to the banking business conducted in such areas and in such a manner that helps the overall reduction of external carbon emission and internal carbon footprint. To aid the reduction of external carbon emission, banks should finance green technology and pollution reducing projects. Although, banking is never considered a polluting industry, the present scale of banking operations have considerably increased the carbon footprint of banks due to their massive use of energy (e.g. lighting, air conditioning, electronic/electrical equipments, IT etc.), high paper wastage, lack of green buildings etc. Banks should adopt technology, process and products which result in substantial reduction of their carbon footprint as well as develop a sustainable business.

Concepts of Green Banking

Green Banking is like a normal bank, which considers all the social and environmental factors; it is also called as an ethical bank. Ethical banks have started with the aim of protecting the environment. These banks are like a normal bank which aims to protect the environment and it is controlled by same authorities as what a traditional bank do. Green banking is like a normal bank, which considers all the social and environmental/ecological factors with an aim to protect the environment and conserve natural resources. It is also called as an ethical bank or a sustainable bank. They are controlled by the same authorities but with an additional agenda toward taking care of the Earth's environment / habitats / resources. For banking professionals green banking involves the tenets of sustainability, ethical lending, conservation and energy efficiency.

Review of Literature

According to RBI (IRDBT, 2014), green banking is to make internal bank processes, physical infrastructure and IT infrastructure as effective and efficient as possible, with zero or minimal impact on the environment. They had introduced green rating standards for Indian banks, which are termed as 'Green Coin Ratings'. Under this rating system, banks are judged on the basis of carbon emissions from their operations and on the amount of recycling, refurbishment and reuse material being used in their building furnishings and in the systems used by them like servers, computers, printers, networks, etc.

Bihari, Suresh Chandra (2010), in his research article analyzed the social responsibility of banking sector. He concluded that the role of banks in controlling the environmental damage is extremely important. As per relatively indirect nature of their environmental and social impacts, banks need to examine the effects of their lending and investment decisions. Incorporating environmental and social criteria into business decision making can reduce the adverse impacts of operating activities. Financial institutions can do a lot to assist efforts for corporate social responsibility and achieve sustainability.

Significance of Green Banking

Green banking is very important in mitigating the following risks involving the banking sector:

- i) **Credit Risk:** Due to climate change and global warming, there have been direct as well as indirect costs to banks. It has been observed that due to global warming, there have been extreme weather conditions which affect the economic assets financed by the banks, thus leading to high incidence of credit default. Credit risk can also arise indirectly when banks lend to companies whose businesses are adversely affected due to changes in environmental regulation.
- ii) **Legal risk:** Banks, like other business entities, face legal risk if they do not comply with relevant environmental regulation. They may also face risk of direct lender liability for cleanup costs or claims for damages in case they actually take possession of pollution causing assets.
- iii) **Reputation Risk:** Due to increasing environmental awareness, banks are more prone to reputation risk, if their direct or indirect actions are viewed as socially and environmentally damaging. Reputation risks emerge from the financing of environmentally objectionable projects.

Steps in Green Banking

From the empirical study, it is found that following are some of the steps that can be taken for going green in banking:

- **Go Online:** Online banking is the developing concept in young and corporate India. Online banking helps in additional conservation of energy and natural resources. Online Banking includes: a. Paying bills online, b. Remote deposit, c. Online fund transfers and d. Online statements. It creates savings from less paper, less energy, and less expenditure of natural resources from banking activities. Customers can save money by avoiding late payments of fees and save time by avoiding standing in queues and paying the bill from home online.
- **Use Green Checking Accounts:** Customers can check their accounts on ATM or special touch screens in the banks. This can be called as green checking of account. Using a green checking account helps the environment by utilizing more online banking services including online bill payment, debit cards, and online statements. Banks should promote green checking by giving some incentives to customers by giving higher rate of interests, waiver or discount in fees etc.
- **Use Green Loans for Home Improvements:** The Ministry of Non-renewable Resource in association with some nationalized and scheduled banks undertook an initiative to go green by paying low interest loans to the customers who would like to buy solar equipments. The rate of interest is as low as 4% p.a. Before you undertake a major home improvement project, study if the project can be done in an eco-friendly manner and if you might qualify for a green loan from a bank

Green loan are perfect for energy-saving project around the house. The new Green Home Loan Scheme from SBI, for instance, will support environmentally friendly residential projects and offer various concessions. These loans will be sanctioned for projects rated by the Indian Green Building Council (IGBC) and offer several financial benefits -a 5 percent concession in margin, 0.25 percent concession in interest rate and processing fee waiver.

- **Power Savings Equipments:** Banks can directly contribute to controlling climate change and as an initial step they intend to start a campaign to replace all fused GSL bulbs, in all owned premises offices and residential. Banks can also make a feasibility study to make rain water harvesting mandatory in all the Bank's owned premises. In December 2009 Indusind Bank inaugurated Mumbai's first solar-powered ATM as part of its 'Green Office Project' campaign titled 'Hum aurHariyali'.
- **Use Green Credit Cards:** Some of the banks introduced Green Credit Card. The benefit of using a green credit card is that banks will donate funds to an environment-friendly non- profit organization from every rupee you spend on your credit card to a worthwhile cause of environment protection.
- **Save Paper:** Bank should purchase recycled paper products with the highest post- consumer waste content possible. This includes monthly statements, brochures, ATM receipts, annual reports, newsletters, copy paper, envelopes etc. Whenever available, vegetable-based inks are used instead of less environmentally friendly oil-based inks.
- **Use of Solar and Wind Energy:** Using solar and wind energy is one of the noble cause for going green. State Bank of India (SBI) has become the first bank in the country to venture into generation of green power by installing windmills for captive use. As part of its green banking initiative, SBI has installed 10 windmills with an aggregate capacity of 15 MW in the states of Tamil Nadu, Maharashtra and Gujarat.
- **Mobile Banking:** Mobile banking is tricky. On the one hand, it is great to have the ability to check balances, transfer funds or pay bills from you phone. One the other hand, it saves time and energy of the customers. It also helps in reducing use of energy and paper of the bank. Most of the Indian banks introduced this paper-less facility.

Conclusion

Green Banking practices provides tremendous opportunities for Indian Banks from funding sustainable projects to offering innovative products and services in the areas of green banking. Initially, these commitments to environmental and social guidelines will cause a huge financial burden for Indian banks. For effective green banking, the RBI and the Indian government should play a proactive role and formulate a green policy guidelines and financial incentives. The survival of the banking industry is inversely proportional to the level of global warming. Therefore, for sustainable banking, Indian bank should adopt green banking as a business model without any additional postponement.

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A STUDY ON GREEN BANKING SCENARIO AND TROUBLES WITH SPECIAL REFERENCE TO CHENNAI CITY

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Abstract

The contemporary period of industrialization and globalization has further a lot of comfort and over-spending to individual life but has also lead to a stressful situation of huge environmental degradation integrated with all the occupied behavior. At current, the whole sector in the world financial system is in front of extremely large face up to deal with the environmental troubles and their interrelated impacts in their day to day businesses. Green banking means promoting environmental-friendly practices and reducing your carbon footprint from your banking behavior. There has not been much idea in this regard by the banks and other financial institutions in Chennai though they play an active role in Chennai's up-and-coming economy, so it is suggested to kick off to support green banking in Chennai. ANOVA test is applied for analyzing the objectives. Therefore, more consciousness is needed to be created among the middle and senior age groups individuals. Whether they face any technical procedural problems as well as administrative problems. I have used SPSS technique as a statistical method.

Introduction

Today, the way we are recklessly consuming resources on earth, the question arises what we will leave for future generation. The concept of sustainable development that is taking care of the need of present generation without compromising the needs of future generation, has given rise to green marketing and then green banking. Green banking is different from conventional banking as convention is based on the principal of security and profitability and morality has a very little role. Green banking is defined as promoting environmental-friendly practices and reducing the carbon footprint from banking activities. The concept and practice of green banking is new to India, but not in developed nations like the USA. There is a need to focus on sustainable banking to protect the environment from disaster. The performance of bank's clients impact the performance of banks so there is a need for appropriate environmental and social due diligence to reduce the chance of non-performing assets, as legal environmental compliance failure can halt the client's project and result in NPA to the bank. The banks in India also started green banking practices such as online banking, mobile banking, Green channel counters, e-statement, green loans, solar ATMs, etc. The issues of global warming should not be only restricted to a debate but has to be dealt with going green. Thus, green banking is one of the ways of going green. There is a need to involve key stakeholders and creating awareness about environment-friendly banking.

Green Banking: Definition

Though green banking (environment-friendly banking, ethical banking or sustainable banking) can be defined in a number of ways, in a broader perspective, it is the environment-friendly banking practices that promote their customers to reduce the carbon footprint through their banking activities. The Indian Banks Association defines it as "Green Bank functions like a normal bank along with considering the social and environmental factors for the protection of the natural resources". The UNEP-FI (2007) states that sustainable bank considers the impacts of its operations, various products and services for the current as well as future generation. The bank is also break new ground in launching of "Green Fund" for

financing green projects (Dash, 2008) and finances only those organizations which work on social, cultural and environmental values.

Objectives

- The revise of more often than not aims at thoughtful the green banking philosophy implementation by the banks.
- The study of the achievement of green banking has many self-motivated. It is always important for decisions makers to know how the usage of green banking product is different among various age groups, gender, and occupants. Environmental location, ease of understanding of green banking products, and financial literacy also play an important role in the acceptance of green banking products.
- The study of create easy the decisions makers to construct a conclusion which group need to be extra listening carefully and targeted since green banking not only make available suitable to the customer but also help the banks to diminish their cost. On the other hand, due to time and money restriction, the current study only focuses on examining the relationship between age groups and acceptance of green banking product.

Review of Literature

A wide-ranging scanning of literature accessible in India from diverse published sources indicates that extremely few detailed studies have been conducted in India in the field of Banking, particularly in the field of Green Banking. Jeucken and Bouma (1999) in their learned identified four stages or attitudes of banking in the direction of sustainability. The first stage is defensive banking, in which bank is non-active and tries to postponement or be in opposition to the new legislation as it can smash up the awareness of banks directly or indirectly. Getzner and Krauter (2004) in their research paper tested the respondents' willingness to provide in green shares. Authors found education; income, environmental awareness and the expected profit are the major clarifying variables. The study by Bhardwaj and Malhotra (2014) linked the presentation of bank by means of the green banking acceptance. They bring into being a positive relationship between adoption of green banking and bank profitability. On the additional hand, comparable study by Rajput, Arora, and Khanna (2014) establish no relationship between green banking initiatives and bank's profitability. Sudhalakshmi and Chinnadorai (2014) considered the green banking adoption standing of Indian banks. Their learned showed that not many initiatives have been taken by banks in India as far as green banking is concerned. At policy level, Choudhury et al. (2014) supportive for the necessity of stakeholder's influence in green banking practice and recommends some suggestion for Government, the whole banking sector and for the business community. Bahl (2012) optional RBI and Indian government ought to play a proactive and formulate green banking policy, guidelines & financial incentives for effective green banking. Nath, Nayak, and Goel(2014) carry out a reading on green banking practices and recommended for modify in schedule operations of banks by adoption of paperless banking, online banking, and mobile banking, and mass transportation system, green cards completed up of recycled plastic. Verma (2012) in his study explained the evolution of green banking in India, and highlight that now banks are incorporating green banking practices in CSR as a main activity.

Data Collection and Sample Size

The data for adoption of green banking product and age pattern have been collected through structured questionnaire. The questionnaire includes thirteen question on the usage of green banking products, namely Solar ATMs, Mobile banking, Green channel counters, Online banking, Green

mortgages, Green remit cards, Green credit card, Online savings account, Green certificate of deposits, Green checking account, E-Investment services, Bonds and mutual fund for environmental friendly project, and Recyclable debit & credit cards. The individual usage score for each green banking product has been calculated on 5 likert point scale, where, likert scale measure frequency of usage of green banking products. The score of one represents, the product has never been used by respondent, whereas, the score of five means product is being used very often. The 112 questionnaires have been distributed personally and online through Google forms to the sample respondent. Samples are drawn from various regions of Chennai.

Data Analysis and Results

The descriptive statistics of mean usage of green banking products across various age groups have been shown in Table 1. The descriptive statistics shows that the usage of green banking product is high among individuals of age groups of 15-30, with mean score of 26.51, whereas, the usage is minimum among individuals of age above 60 with mean usage of 15 only. The standard error of the mean score for each group is between one and two, which is consistent and moderately low.

Table 1 Descriptive statistics of green banking product across various age group

Age Groups	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
15-30	66	26.5152	9.09648	1.11970	24.2790	28.7513	13.00	49.00
30-45	26	26.0741	7.741120	1.49064	23.0100	29.1381	13.00	49.00
45-60	16	22.9333	7.38209	1.90605	18.8453	27.0214	13.00	39.00
60 Above	4	15.0000	2.30940	1.15470	11.3252	18.6748	13.00	17.00
Total	112	25.5179	8.66492	.81876	23.8954	27.1403	13.00	49.00

To test the hypothesis, is usage of green banking products (adoption) independent of age, ANOVA test has been conducted. The result of ANOVA test has been shown in Table 2. The p value of chi-square statistics is found to be 0.039 (less than 0.05), which reject our null hypothesis that usage of green banking is independent of Age. Since, ANOVA test assume variance is equal across various group age group, therefore, to test the equality of variance, Level test1 has been applied and results have been shown in

Table 2 ANOVA results of test of equality of mean usage across various age groups

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	616.694	4	205.1125	2.877	.039
Within Groups	7717.270	108	71.4112		
Total	8333.964		112		

The p value for Level statistics is more than 0.05 which provide evidence of equality of variance. The limitation of ANOVA is that it does not explain which group account for significant difference in the mean. If mean usage is not equal among various groups, then ANOVA is not sufficient to identify which group causes the inequality or for which group there exist significant differences.

Suggestions

1. Make customers more and more aware about green banking through their websites.
2. Promoting different forms of electronic banking.

3. Creating customer's awareness through the media.
4. Carbon footprint reduction by saving energy and paper.
5. Carbon footprint reduction by offering transportation services for their employees.
6. Providing environment friendly rewards to customers.
7. By financing more and more environmental-friendly projects.
8. Join hands in more and more environment preserving causes.
9. Focus on greening IT infrastructure.

Conclusions

Green banking is clear as promoting environmental-friendly observes and reducing the carbon trace on or after banking behavior. It engage make use of of online banking, mobile banking, green channel counters, e-statement, green loans, solar ATMs etc. i.e. using banking services from beginning to end online activities. It is a worldwide awareness that it is more customary surrounded by youth, but fewer all the temper among aged citizens. For that reason, the present revise test for practice of green banking habit surrounded by various age groups.

The current knowledge finds with the aim of the young generation is added of a mind towards green banking products then middle age and senior age groups (above 60 years). The mean score of usage of green banking products among low age group (15-30) is 26.52, at the same time as, it is just 15 for persons age above 60. As a effect, the present study finds with the reason of there is more of require to create responsiveness about green banking products implementation between the middle and senior age groups individuals than young age group of people.

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CREDIT MANAGEMENT AUDIT OF BANKS UNDER RISK ASSESSMENT PERSPECTIVE

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Abstract

Indian Banking Industry is subject to fast changing technological environment in this complex global economy. This is solely attributed to dynamism in its operations and vulnerability to both external and internal risks. Due to growing interdependence in the layers of credit management, a huge quantum of disasters is inevitable. This Risk is universal and any entity which is risk free is said to be absolutely theoretical. Credit Administration is a sensitive portfolio of any bank and hence, greater emphasis is laid on the successful identification, quantification, mitigation, control and financing of risks. Any financial institution has to put in an efficient technological infrastructure in place to identify the risk parameters to measure and monitor the risk profile in order to manage the dynamic change in the texture of economy. The process of Recognition and Understanding, Measurement, Monitoring and control is evaluated through installation of a robust Management Information System. Credit Risk, Market Risk which stays an efficient life support system to our Economy. Risk Assessment Techniques are the crucial tools in the credit administration under risk management perspective in order to establish a well-defined credit culture and Supported by an effective Loan Policy adopted by various banks and financial institutions in the country.

Keywords: Core Banking Solutions, NPAs, Financial Sector, Banking sector, Risk Assessment

Introduction

In our Indian banking industry the risk management involves the recurring exercise in identifying potential risks in the credit portfolio in order to take precautionary steps to reduce/curb the risk. Whenever a credit decision is taken it exposes the bank to a number of financial risks. The quantum of such risks depends on the type of credit content. These financial risks might be in the form of high inflation, volatility in capital markets, recession, bankruptcy, global recession, etc. In order to minimize and control the exposure of credit portfolio to such risks, the credit managers' practice risk management concepts in order to establish a robust Risk Assessment framework in its audit and inspection mechanism.

On the other hand if due importance to risk management is not given while making investment decisions might wreak havoc resulting in accrual of Non-Performing Assets resulting in financial turmoil and even eroding the bank's capital base. Hence there is a need to assess different levels of risks with different categories of asset classes.

Risk refers to 'a condition where there is a possibility of undesirable occurrence of a particular result which is known or best quantifiable and therefore insurable'. A risk can be defined as an unplanned event with financial consequences resulting in loss or reduced earnings. An activity which may give profits or result in loss may be called a risky proposition due to uncertainty or unpredictability of the activity of trade in future. In other words, it can be defined as the uncertainty of the outcome. As risk is directly proportionate to return, the more risk a bank takes, it can expect to make more money.

Business Risk & Control Risk -While practicing risk management in Credit and Credit Monitoring the risk assessment model is diversified basically into two segments viz,

Control Risk: It includes Operations, Credit & Monitoring, NPA Management (Recovery), Profitability (Interest & Other Service Charges), Information System, Administration and Foreign Exchange and Foreign Exchange Operations.

Business Risk: It involves Composition of Advances, NPA Analysis, Composition of Deposits, Frauds, Customer Base and Business Performance of the Bank.

Genesis of the Risk Management Concept

Generally operations in banks are exposed to potentially vulnerable to the following risks: liquidity risk, credit risk (including residual risk, dilution risk, settlement/ delivery risk, and counterparty risk); interest rate risk; foreign exchange risk and other market risks; concentration risk, particularly including risks of exposure of the bank to one person or a group of related persons; bank's investment risks; risks relating to the country of origin of the entity to which a bank is exposed (country risk); operational risk particularly including legal risk; risk of compliance of the bank's operations; risk of money laundering and terrorist financing; and strategic risk¹.

Role of Risk Assessment in the Credit Portfolio of Banks

Credit portfolio in any financial institution is the most sensitive segment in operations. This envisages risk mitigation and it subject to periodical assessment and review by the top management. Reserve Bank has spelt out immense clarity in this segment and proposed various measures under Risk Mitigation strategy. ²Banks in the process of financial intermediation are confronted with various kinds of financial and non-financial risks which are highly interdependent and events that affect one area of risk can have ramifications for a range of other risk categories. Thus, top management of banks attach considerable importance to improve the ability to identify, measure, monitor and control the overall level of risks undertaken. Banks have therefore instituted a Risk Based Internal Audit mechanism as a part of compliance of Regulatory norms. In this paper we evaluate a various Credit Management techniques adopted by banks under Risk Management perspective. Every branch is subject to both internal and external audit where the most vulnerable credit portfolio is subject to periodical scrutiny. Hence the following procedures are adopted in the process of audit scrutiny under Risk Assessment Model³:

Loan Application: A preliminary scrutiny and evaluation is undertaken as to whether

1. Application is obtained on the prescribed format in vogue and complete in all respects
2. Information relating to charges/fees and 'all in cost' is informed to applicant.
3. The relevant documents are obtained along with the application
4. Loan Processing charges, in applicable cases, are recovered / paid by the applicant.
5. Acknowledgement of application is issued to applicant who seek credit.
6. The branch maintains and updates proposal received/ sanctioned/ rejected register.

Pre sanction Process and an Adequate Credit Appraisal- A scrutiny is undertaken as to whether

1. Due Diligence is carried out in identification of the borrower and KYC documents duly are duly verified with the respective originals by the authorised officials of the branch.
2. Credit facility(s) / loans are considered for approved or legitimate purposes.
3. The credit proposal earlier was not declined by higher authorities or by other banks.
4. Authority/Rights of Power of Attorney are verified in applicable cases.
5. Scrutiny of documents obtained like Memorandum & Articles of Association, Certification of Registration and Commencement, Board Resolution to borrow from Bank, employers undertaking letter, partnership deed, annual report and copy of statutory clearance and developments etc. are carried out with due diligence.
6. Confidential opinion/ Regularity Certificate/ No Objection Certificate from existing bankers are obtained in the case of a new borrower and Associate/ sister concerns dealing with other Banks/

branches and branch has adopted a system to check genuineness of such certificate/NOC /personal visits, etc.)

7. Loans outstanding with other banks/financial institutions are perused and examined
8. Statutory dues/ Liabilities including contingent liability outstanding against the applicant/prospective borrower are scrutinized by the bank.
9. Credentials and antecedents /Repayment track record related to credit worthiness of the borrower(s)/promoter(s)/ guarantor(s) are ensured.
10. CIBIL reports/ RBI defaulter list/ caution list/ECGC's Specific Approval List etc. are verified by bank before sanction/recommendation of credit facilities
11. Verification of income sources of applicants and Guarantors with income tax, service tax, sales tax returns.
12. Pre- sanction inspection/site visits/ inspection of properties offered as mortgage is conducted by bank.
13. Analysis of latest financial statements and verification of genuineness of financial statements of applicant and its group concerns.
14. In the case of Gold/Jewel loan, valuation of jewellery is done by approved jewel appraiser.
15. Valuation of securities giving full descriptions of the assets is obtained from the bank Approved Valuers as per guidelines in the prescribed format & Branch Head endorses the same. Second valuation report is obtained in eligible cases.
16. Discharge on Deposit Receipt is verified and duly authenticated by the branch authorised official. Genuineness of LIC Policy/NSCs/Other Securities are verified by the branch.
17. In case of multiple banking arrangements, declaration from borrower regarding credit facilities enjoying with other banks, authorization letter to exchange information with other banks is obtained.
18. Due diligence report from Company Secretary/ Chartered Accountant of the borrower company is obtained in applicable cases as per guidelines.
19. Verification of compliance of Take-over norms including reasons for shifting, verification of statements of accounts with previous bank, etc.
20. Legal Search Report (LSR) obtained from panel advocate in prescribed format & Branch Head endorses the same.
21. Verification of genuineness of title deeds by counter-checking with the Certified Copies
22. Working capital limits/ term loans/ other credit facilities are assessed as per bank norms and Regulatory Guidelines in respect of ceiling of limits & sectors are ensured.
23. Deviations in financial parameters, if any, are discussed in the appraisal note and are approved by competent authority (as per Bank's Loan Policy) before sanction of loan.
24. Credit Limit sought commensurate with needs of the unit, assumptions made are correlated with trend/ profits wherever applicable and veracity of assumptions is ensured vis-a-vis proper documents supporting it.
25. In case of terms loan, project appraisal has been done/ studied in applicable cases.
26. Technical feasibility, economic viability, location etc., have been properly assessed and ensured.
27. Inherent risk in the business of the borrower is identified and its mitigations are discussed in the appraisal note.
28. Comparison with key financials of peers, wherever feasible is done.
29. Information regarding interest of directors, executive of the bank/ other bank, their relatives if any is obtained and considered/ detailed in the process note.

30. Negative features like adverse audit remarks, non-routing of sale proceeds, non-servicing of EMIs, out of order position in CC/OD A/c, devolvement of LCs, invocation of guarantees, adverse features in the accounts of associates/group concerns etc. are appropriately considered / detailed in the process note.
31. Repayment period, moratorium period, margin, cut back, surety, security etc. is stipulated/ obtained as per bank's guidelines. Deviation if any are approved/ permitted by the competent authority.
32. Exposure limits are complied with the bank's policy guidelines.

Sanction Parameters: Any Credit proposal is subject to the fact that the:

1. Loan is recommended /sanctioned by competent authority within delegated powers
2. Applicable rate of interest is stipulated or Finer rate of interest, if any permitted, is approved by the competent authority.
3. Modification, if any, in sanction terms is approved by the competent authority
4. Undertaking letter regarding, Bank's right to reduce the limit in case of non-utilisation in all cases.
5. Adherence to time norms for sanction /Review/Renewal
6. Administrative clearance is obtained wherever prior clearance is required.(e.g. New Business Group [NBG]approval, Deviations from policy etc.)
7. All pre and post Disbursement terms and conditions are separately specified and are conveyed to the borrower and acknowledgement obtained on the copy of sanction advice.

Credit Sanction Reporting and its Review

1. Process notes/ Sanctions are forwarded to Reviewing authority (Controlling Office) within stipulated time.
2. Sanction is reviewed by reviewing authority and review observations are rectified/ complied with.

Loan Documentation

1. Prescribed documents are obtained and signed by all the parties concerned, complete, valid, enforceable, and adequately stamped and all covenants duly incorporated.
2. Copy of documents executed under consortium advances is held (where bank is not the leader).
3. Vetting of documents by panel advocate as per extant guidelines and deficiencies noted by panel advocates if any, are rectified.
4. A copy of documents (excepting loan appraisal / process note) executed has been handed over to the borrowers against their acknowledgement.
5. Balance confirmations are obtained and signature of the borrowers/guarantors thereon verified
6. All documents are in proper custody and available for verification and updated in CBS system.
7. Documents of closed accounts are properly cancelled to avoid misuse of the same.
8. Credit Audit is conducted in the accounts eligible for "Pre-disbursement Credit Audit" or "Post-disbursement Credit Audit" and Compliance to the report is accepted by Credit Monitoring Committee (CMC) of the bank.

Security/ Charge Creation

1. All formalities regarding creation of EM/ charge, including paripassu/ second charge is completed.
2. In respect of Unregistered Equitable Mortgage (UREM), bank interest is notified to Central Registry/ Revenue Authority.
3. In case of Equitable Mortgages, borrowers, wherever applicable, are advised to file Notice of Intimation with Sub Registrar within 30 days of creation of charge.

4. Proper recording is done in Equitable Mortgage Register and assets ID is noted.
5. In case of Registered Mortgage, adequate stamping is ensured.
6. Proper/ timely registration of charges with ROC/ other registration authority within the prescribed period.
7. In the case of joint property, all joint owners have executed the mortgage documents.
8. In case of vehicles, Bank's interest is registered with RTO and duplicate key of the vehicles or letter in lieu thereof is obtained, and blank transfer form 29 and 30 duly signed by borrower are obtained.
9. No Objection Certificate for creation of charge obtained from concerned authorities in applicable cases(e.g. NOC from Builder/Society/Govt Authorities etc)
10. In case of frequent overdrawn beyond sanctioned limit, whether additional collateral security if required is obtained from the party.
11. Guarantees have been obtained as stipulated
12. All eligible financial securities like Deposit Receipts, Insurance Policy, NSC, equity, other debts securities are assigned/ discharged in favour of bank and lien is noted.
13. In case of GOLD loan, jewellery obtained is properly secured as per guidelines and kept in dual custody.
14. Bank's name plate is properly displayed where charged securities are located.
15. Hypothecated /Pledged goods are properly stored/ arranged/ identifiable.
16. Goods pledged/hypothecated are fully paid for.
17. At the time of closure of gold loan, acknowledgement of borrower for the jewellery etc., delivered is obtained and properly recorded.
18. On closure of Home Loans property documents are handed over to the borrower only against proper identification.

Legal Compliance and Due Diligence

1. Certificate on legal compliance and due diligence and compliance with terms and conditions of sanction submitted to controlling office and confirmation obtained.
2. Whether the branch has a list of empanelled lawyer as per norms.
3. Legal opinion/clarification of doubts/ verification of documents and any other requests are attended by the advocate within reasonable time.
4. Follow up/ legal assistance of Advocate in suit filed cases and other legal matters is satisfactory.
5. The consultation fees are paid as per guidelines/ terms of appointment.
6. There is no concentration of work to one advocate.
7. The performance of the advocate is reviewed periodically.
8. The cases decided against the bank are placed before the competent authority for necessary action. The claims are disposed off as per Orders of the court.
9. Information regarding court cases/litigations if any is obtained and considered/detailed in the process note.
10. Follow of Cases filed in DRT through the panel lawyers in respect of:
 - DRT/ Suits are filed after obtaining permission/ sanctions from the competent authority.
 - Steps are taken to ensure that decree copy is received in time in case of suit filed accounts.
 - Steps are taken to obtain back, mortgage papers/ title deeds deposited in court/ DRT immediately after decree/ decision
 - Execution Petition (EP) is filed within reasonable time of obtaining decree copy and latest position of suits/ EPs is ascertained from the respective case lawyers.
 - Recovery certificates issued by DRTs are enforced in time.

- Final decree petition is filed within the time stipulated in the preliminary decree.
- Cases are filed under State Revenue Recovery Acts in eligible cases and are followed up.
- Attached/seized securities are preserved/ maintained properly.

Release and verification of end use of funds

1. Sanctioned credit facilities are disbursed only after compliance of pre-release sanction terms and the same certified by appropriate authority.
2. In case of purchase of Immovable property with value of Rs 50.00 lacs and above, borrowers are advised to comply the TDS provisions as per section 194A of I.T. Act, 1961
3. In the case of consortium advances (where bank is not the leader) copy of certificate on compliance with terms of sanction issued by the consortium leader is held.
4. Revalidation of sanction obtained in the case of lapsed sanctions
5. Required margin is brought in and necessary certificates for infusion of margin are obtained.
6. Sanctioned limits are opened through the Master Creation inCBS system properly wherein all fields and information are updated in the system correctly.
7. Disbursements are made as per terms of sanction/ prescribed norms, margin is ensured, and proper rate of interest is applied.
8. Disbursements/Releases are made against original invoice / delivery challans / inspection notes in case of supply bills
9. In respect of loans sanctioned for purchase of articles / machineries etc., loan proceeds are released by direct payment to the suppliers and documentary evidence is held by the branch
10. Specific/ stage wise releases are made wherever required/applicable after proper verification of end utilization of previous release.
11. End use of funds is physically verified after disbursement/ on regular basis as per requirement and proof of purchase of goods held.
12. Claiming and accounting of subsidy/Back end subsidy has been done as per guidelines

Review/ renewal of limits

1. Review/renewal/enhancement of the accounts done as stipulated.
2. Operations are not allowed in expired Cash Credit limits.
3. Renewal application submitted by the borrower in time.
4. Provisional extension is granted after proper review as per guidelines.
5. Proper reasons are recorded for repeated extension,
6. Annual review, Mid year review and other periodical reviews are carried out where ever prescribed.

Non Fund Based Advances –Bank Guarantees

1. Guarantees are issued within sanctioned limit or specific approval of competent authority.
2. Guarantees are issued with limitation clause only.
3. Guarantees do not contain onerous clauses. If at all guarantees are issued with onerous clauses they are approved by competent authority.
4. Tenure of the guarantees are within the limits sanctioned by the appropriate authority.
5. Payment against invoked guarantees are done promptly.
6. Invoked guarantees are reported to Controlling Office and followed up for recovery.
7. Expired guarantees are followed up for return of the original guarantee.
8. Expired guarantees are cancelled after following the prescribed procedure of giving notices to the beneficiaries.

9. Post sanction control/follow up of Non Fund Based facilities like reversal of entries of expired BGs, realisation of devolved LCs etc., are carried out.

Credit Administration

1. All primary security and collateral securities are inspected periodically and reports placed on record.
2. Monitoring of performance of borrower vis-à-vis projections
3. Joint inspection of securities is conducted as per arrangements under consortium advances
4. Valuation of securities is obtained as per guidelines periodically from approved Valuers
5. Erosion in the value of primary/collateral securities, if any, is reported properly and necessary action is taken to safeguard bank's interest.
6. Securities have been insured for full value covering all stipulated risks with bank clause
7. Renewal premium is remitted well in advance to ensure timely renewal of insurance policies and recovered from respective borrower.
8. Stock statements and other Information/ Statements are obtained from the borrower as per prescribed schedule, verified and analysed and perusal of accounts where stock statement is more than 2 months old in order to arrive Drawing Power in operative accounts as per guidelines.
9. Whether book Debt statements are duly certified by chartered accountant on quarterly basis. If not, give details thereof.
10. Inventory of stock is checked regularly as per norms and entered in the prescribed manner in register/system and Stock audit is conducted wherever applicable, and deficiencies observed if any, are rectified.
11. Book Debt Statements/ List of sundry creditors are obtained at prescribed intervals and analysed.
12. Financial statements of borrower/ associate/ sister concern are obtained regularly and analysed to verify any interlocking of funds.
13. Diversion of funds, is monitored and steps are taken to safeguard interest of the bank
14. In cash credit accounts, sales proceeds are routed through the account on daily basis and monitored regularly.
15. Reviewing internal credit rating and obtaining fresh external ratings as per guidelines
16. Wide slippage in the internal/ external rating of borrower, if any, are examined and reported to CO.
17. Consortium meetings are held periodically and minutes are placed on the record and necessary actions are taken and sharing of information in case of consortium/ multiple banking arrangements.
18. Unit visits are done periodically and report prepared and observations on independent unit visit/verification of assets are attended promptly.
19. Overdues are checked and reported to Controlling authority. Position of irregular accounts is reported to RO through "SMA" Report.
20. Frequent excess drawings / devolvement of LCs/ Invocation of BGs/ return of cheques if any.
21. Conduct of the account is as per sanction terms
22. Periodic verification of charge is made ROC.
23. Monitoring of interchangeability between fund based and non fund based limits, where ever permitted.
24. Timely filing and follow up of claims for/ subsidy/ interest subvention etc.
25. All Inspection and Reports reports have been closed by Credit Monitoring Committee of RO/ZO and Closure Certificates are available at branch.

Accounts under Watch Category

1. Measures for regularisation of loan accounts are initiated at first signs of irregularity

2. Steps are initiated to prevent/reduce the incidence of slippages in Standard Assets.
3. Accounts with warning signals are monitored continuously
4. Sick units are identified periodically as per guidelines and rehabilitation package recommended in the case of viable units
5. Names of defaulters are reported to Controlling Office to enable them to place them in the RBI Defaulters List/Wilful Defaulters List.

Management of Non Performing Assets

1. All accounts identified by the system as NPA have been classified as per prudential norms. Divergence, if any are justified
2. There is no divergence in the NPA provisioning norms.
3. In case multiple Ids exists, it is ensured that if one of the accounts of a borrower is classified is NPA, all accounts of that borrower are classified as NPA.
4. Collection/Enforcement Agents appointed, if any are from the approved list, their conduct is monitored and performance reviewed periodically and necessary action, including termination of services.
5. In case of NPAs, whether branch obtained valuation report from approved valuers for the fixed assets charged to the bank as per the guidelines.
6. Notices are issued under SARFAESI Act, against all irregular Mortgage loan accounts
7. Possession is taken expeditiously as per norms.
8. Steps are taken to auction the assets expeditiously.
9. OTS proposals are taken up as per guidelines and proposals are encouraged in eligible cases and sanction obtained from the competent authority.
10. Terms and conditions of OTS are conveyed to the borrower with proper acceptance and acknowledgement.
11. Accounts where OTS has not materialised and payments are not forthcoming as per the terms and conditions of OTS are monitored and reported to Controlling Office.
12. CDR cases are handled as per norms, debtor/creditor agreements are taken, charges are created/ceded as per CDR package, Monitoring Committee Meetings are held regularly and attended, performance is monitored and reported periodically, unfavourable developments are reported to Controlling Office.
13. ECGC/ CGTMSE claims are filed within due dates and are followed up for early settlement
14. Staff accountability- Action is taken to fix staff accountability for Non-adherence of guidelines/ policy norms and Quick mortality accounts.

Conclusion

This paper has explored all the critical aspects of risk management and compliance in the Banking Industry. I have sincerely attempted to share my experience gained in the banking industry to understand the importance of risk management at all levels of internal and external control and by the explicit incorporation of risk assessments in the structure of all control activities in the management of credit portfolio in banks. The growth of enterprise risk management, in internal and external audit, in the compliance function, and in regulatory supervision and examination is the key player for institution of a robust framework in the Credit Portfolio of any Bank. This issue of risk component in the Banks Credit portfolio is not going to disappear. It is at the core of the banking sector and will only be complicated further as banking evolves. Therefore, it is vital that banks have to adopt to restructure its methodology

to incorporate all the parameters to build a robust infrastructure framework for effective and efficient Management of Credit.

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It has been my long-term endeavour to study the micro aspects in risk management under credit perspective. During the course of my professional interaction with various bankers sharing my experience in credit management it has always been my pleasure to revisit every single segment under Credit Management which has immensely helped me to evaluate the reasons for loans slipping into Non Performing Assets which is my Core Research study. This brief paper will also serve as a ready reckoner to all bankers who manage credit portfolio at various levels both at Administrative and Operational functions in the Banks and Financial Institutions. A long journey is undertaken to probe and elucidate the sensitive factors in Credit Management on the basis of my long experience in the banking sector. With the inputs drawn from my colleagues both in the Banking and Audit fraternity coupled with my work experience as a Banker I sincerely dedicate this paper to one and all who supports me in all my professional and academic endeavours. I sincerely thank my faculties at Department of Commerce, University of Madras who motivated and encouraged me to undertake this study although the paper may not have fully concurrence from them in terms of my interpretations/conclusions of this paper in academic perspective.

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Abbreviations Used

1. CBS – Core Banking Solution
2. CGTSME – Credit Guarantee Trust for Small & Medium Enterprises
3. DICGC – Deposit Insurance & Credit Guarantee Corporation.
4. DRT – Debt Recovery Tribunal
5. ECGC – Export Credit Guarantee Corporation
6. NPA – Non Performing Assets
7. OTS- One Time Settlement
8. ROC – Registrar of Companies
9. SMA – Special Mentioned Accounts

“A STUDY ON PROSPECTS AND CHALLENGES OF ONLINE BANKING SERVICES IN INDIA”

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Introduction

Online or Internet banking is a way for customers of a bank to conduct a range of financial transactions through their online banking channel. Online banking gives you the freedom to bank where and when you want and is a very convenient way to stay on top of your finances. A method of banking in which transactions are conducted electronically over the Internet.

The term Online Banking or Internet Banking or E-Banking are used as supplement. Making banking products and other services available to wholesale and retail customers, through an electronic distribution channel is called e-banking.. The use of ATM's lead to the concept of 'anywhere' and 'anytime' banking. Through the use of ATM cards, one can operate his bank account to withdraw money from any of bank's ATM installed or available at the nearest site. This had broken down the time and space barriers. The new banks are providing some of the services exclusively through ATM's. The growing popularity of personal computers, easy access to internet and world wide web (WWW), has increased the use of internet by banks as a channel for receiving instructions and also delivering their products and services to the customers.

Objectives of the Study

- To identify various online banking services/functions adopted by Indian banks.
- To study and analyze the progress made by Indian banking industry in adoption of technology.
- To study the challenges faced by Indian banks in adoption of technology and make recommendations to tackle these challenges.

Prospects of Online Banking

The Internet has leveled the playing field and afforded open access to customers in the global marketplace. Internet banking is a cost-effective delivery channel for financial institutions. Consumers are embracing the many benefits of Internet banking. Access to one's accounts at anytime and from any location via the World Wide Web is a convenience unknown a short time ago. Thus, a bank's Internet presence transforms from 'brouchreware' status to 'Internet banking' status once the bank goes through a technology integration effort to enable the customer to access information about specific account relationship.

Challenges of Online Banking

The challenges related to Online banking prevail in Indian context are discussed below:

Security Risk: The problem related to the security has become one of the major concerns for banks. A large group of customers refuses to opt for Online banking facilities due to uncertainty and security concerns. According to the IAMAI Report (2006), 43% of internet users are not using internet banking

in India because of security concerns. So it's a big challenge for marketers and makes consumers satisfied regarding their security concerns, which may further increase the online banking use.

Privacy risk: The risk of disclosing private information & fear of identity theft is one of the major factors that inhibit the consumers while opting for internet banking services. Most of the consumers believe that using online banking services make them vulnerable to identity theft. According to the study consumers' worry about their privacy and feel that bank may invade their privacy by utilizing their information for marketing and other secondary purposes without consent of consumers.

The Trust Factor: Trust is the biggest hurdle to online banking for most of the customers. Conventional banking is preferred by the customers because of lack of trust on the online security. They have a perception that online transaction is risky due to which frauds can take place. While using Online banking facilities lot of questions arises in the mind of customers such as: Did transaction go through? Did I push the transfer button once or twice? Trust is among the significant factors which influence the customers' willingness to engage in a transaction with web merchants.

Customer Awareness: Awareness among consumers about the Online banking facilities and procedures is still at lower side in Indian scenario. Banks are not able to disseminate proper information about the use, benefits and facility of online banking. Less awareness of new technologies and their benefits is among one of the most ranked barrier in the development of online banking.

Less Internet Penetration in Indian Context: The Online banking channel has evolved over the years. In 2011, 60% of the times basic transactions in banks were conducted in North America through online channels, whereas internet banking usage in India increased from 1% in 2006 and 7% in 2011. So the knowledge and availability of internet is still a one of the biggest challenges that prevails in Indian context. According to the report of IMAI 2006 around 22% of internet users do not have knowledge about transferring online. So the penetration of internet and knowledge related to internet are major hurdles.

Services Provided by Online Banking

Queries	Transactions
<ul style="list-style-type: none">• Check Balance• See Statement• Inquire about Cheque status• Ask for a Statement• Ask for a Cheque Book• Inquire about Fixed Deposit• Inquire about TDS details• See Demate Account• Update profile	<ul style="list-style-type: none">• Stop a Cheque• Pay Bills• Ask for a Demand Draft• Transfer funds between accounts• Transfer funds to a third party• Request for a new Fixed Deposit• Shop Online• Pay Bank Credit Card Dues

Scenario of Online Banking

Online Banking has become an integral part of banking system in India. The concept of online banking is of fairly recent origin in India. Till the early 90's traditional model of banking i.e. branch based banking was prevalent, but after that non-branch banking services were started. The Indian government enacted the IT Act,

2000, with effect from the 17th October 2000. To examine different aspects of Online banking RBI set up a committee on Online Banking. The committee had focused on three major areas of online banking, Technology and security issues, legal issues and regulatory and supervisory issues.

Conclusion

Finally, the study concludes that online banking is need of the hour. Though there are lots of hurdles in the way of smooth implementation of online banking in India but at the same time online banking has bright future in India. It is golden path for banking sector in India to maximize its profits and also the customer base. That's why online banking can never be neglected. Moreover the recommendations provided in this research are useful for the banks and also for the customers for better service and

satisfaction respectively. Thus only those banks will survive in the future which will manage the changes as per technological developments and customer requirements because future of the banks ultimately stays in the hands of customers. They should be satisfied at any cost. Banks are making sincere efforts to popularise the online banking services and products. Younger generation is beginning to see the convenience and benefits of online banking. In years to come, Online-banking will not only be acceptable mode of banking but will be preferred mode of banking.

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RECENT TRENDS IN BANKING TECHNOLOGY

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Abstract

Information Technology has taken an important place in the future development of banking sectors. Information Technology architecture is an integrated work for acquiring and evolving with achievement of strategic goals. Technology is used for input, processing storage and communication of information. Recent development of Banking sector like UPI, Banking on the cloud, siri Artificial Intelligence, chat bots, Block chain trees to satisfy the customers to a greater extent with its speed, accuracy of reliability service quantity is high and appreciable when the customer chooses technology. Customer is in greater control with his transaction when he is in contact with technology service quality enhanced through technology has an impact on financial performance of banks. Therefore it is more beneficial to the banking industry to adopt and adopt to the upcoming technology advancements.

Keywords: Information technology, service Quality, customers, financial performance.

Introduction

The banking industry of India is in the pace of digitalization to service and grow in the changing market. The regulatory and competitive seasons have led to banking automation. Information tech has been used in banking industries for communication and for process reengineering. It also helps in product development, reduce risk of intermediaries, implement risk control techniques and enhance market infrastructure. Info Tech has made its impact on the contours of three major functions of banks like liquidity, asset mgt + risk mgt. further Info Technology and the communication networking systems have a great influence on efficiency of capital of foreign exchange. During the 1980 banks started to computerize the branches in a very meager manner Later after the 1990 when the computer – hardware of software were becoming cheap and inexpensive, banks went for total automation.

The late 90 experienced a greater reform in areas of financial reforms, deregulation, globalization along with communication revolution through internet mobile phone etc. brought about a frogs leap in the technological advancements in banking industry.

Literate Review

1. Vadlamani Rani (2007) defines the term “Banking Technology as the use of latest technologies of information and communication together with software and hardware to enable banks to offer better services to customers on areas of security, reliability and to section in the competitive market of other banks.
2. Among the total public sector banks branches around 98% are fully computerized.
3. Sharma M.C and Sharma Abhinav reported that Indian public sector banks which accounts for amount 75% of the market have taken initiative in the field of info Tech of communication.
4. Information Technology is one important factor in nowadays different businesses (Tavares)2000)
5. Therefore it is important to research the need and ways and the models of investment for enhancing technology in banking industry (Saunders and water 1994, sethi and king 1994)
6. Dabhokas (1994) in his study reveals that customer is in greater control with his transition when he is in contact with technology.

7. Bateson (1984) has concluded based on his several studies that service quality is high and appreciable when the customer chooses technology for the same.
8. This concept was also proposed by Weatherall et al (1984) who propounded that customers would have a positive perception on service rendered through technology, as the service rendered based on technology would be faster and reliable.
9. Gummeson (1991) also emphasized on reliability of user friendliness in technology based services.
10. Lake of Hickey (2002) – Today winners are companies or industry who overcome the customer cynicism by exceeding their expectation and going a step ahead of their expectation these firms would be successful, this not only promotes the number of customers but also customer loyalty which is very much needed for the continuous growth of firm or industry.
11. (Bauer et al., 2005; Lee and Lin 2005; Parasuraman et al., 2005) The ever changing business environment in the financial services market has resulted in the exceeding pressure which exists on banks to develop and utilize a strategy on services rendered to improve customers perceptions and loyalty.

Objectives of the Study

- To find the new trends in all the public sector and private sector banks
- To find opportunities and challenges in implementing IT solutions in banking sector.

Sources of Data Collection

The study is based on the secondary data collected from different journals, websites, magazines and published data from issues of RBI and from other sources. Previous studies on the relevant themes have been referred to in this study. The heads and other personnel from banking industry have been contacted personally to collect the relevant data for this study.

Research Design

Database has been collected through exploratory research design.

Significance of the Study

The banking sector has now gone beyond its traditional mode and plays a great role in key areas like security, action, liquidity, reliability, risk, preference to which IT helps in a big way. With IT revolution banks are increasingly interconnecting their computer systems not only across branches within country but also between branches from other geographic locations.

Limitations of the Study

The research work was carried out on the basis of secondary data only.

Open Banking

Open banking is a system for financial, non – financial services with multiple underlying service providers is the future of banking sectors. The introduction of UPI by the National Payments Corporation of India (NPCI) has paved the way for open banking system. Unified Payment Interface the RBI promoted instant payment mechanism showed more than 100% growth in recent months. According to NPCI data October 2017 showed 76.9 million transactions against 30.9 millions in Sep 2017. Amount transfer through UPI was 7057 in 2017 against 5325cr in years 2016. UPI emerged as a major game changer in digital payment after demonetization. Even the Government launched BHIM (Bharat Interface for Money) to work on UPI Platform. From the year 2017, it will help move funds and open new fixed deposit A/c with banks.

Banking on the Cloud First Strategy

Progressive Banks are making strides in cloud banking. The Technology that is changing the business face or big data, Block Chain, Artificial Intelligence, IOT will be leveraged using cloud computer. Many New Banks and Fintechs will be largely driven by Cloud.

SIRI - An Overview

ICICI Bank, India's largest pvt sector bank has announced the launch of India's First voice – based international remittance service to NRI's to send money to any Indian Bank with this feature in ICICI Bank's Money 2 India app, an NRI customer can instantly remit to the payees in India with a sample voice command to Apple's virtual voice assistant, Siri, on his/her Apple iphone.. To get the benefit the customer needs to only speak out, Based on voice instruction, Siri converts voice command to text using Natural Lang processing (NLP). The customer need not enter payee name or amount to be transferred. Upon confirmation siri passes request to app and opens app on device.

Next Gen Chat Bots

Gartner Predicts that by 20-20 Customers will manage 85% of their transactions with enterprise without interacting with human unlike "Live Chat that is prevalent in online banking" Chat Bot banking is 100 % automated. "Chat "is designed to streamline and optimize with the digital services of banks.

Block Chain

Block Chain is a digital ledger In Which transactions made in bit coin or another crypto currency or recorded chronologically and publically. It addresses many challenges associated with digital transactions such as double spending and currency reproduction.

Artificial Intelligence

"Machine Intelligence the last invention that humanity will ever need to make – NICK BOSTROM. Artificial Intelligence is being used in financial Services industry and is becoming more popular in Digital Areas of the banking Sector too.

Opportunities and Threats

Threats

- Security Risk
- Customer Awareness
- Trust Factor
- Privacy Risk

Opportunities

- Untapped Rural Markets
- Increasing Computer Literacy
- Customer Service

Conclusion

The banking industry has become the leader in digital era. The e-banking has revolutionized the industry to a greater extent throughout the world and India too is the list. It has strong impact on the banks by cutting down the costs and meeting the ever growing expectations of the customers. The predominant benefit for banks is the increased customer satisfaction which in turn increases the customer loyalty and retention.

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OPPORTUNITIES AND CHALLENGES OF ONLINE BANKING

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Abstract

Online Banking is an important factor for the development of financial service industry, especially Banking Industry. The growing international trade and problems in transferring money have motivated researchers to introduce a new structure "Online Banking" is a blessing in disguise to such customers. Online Banking is beneficial to Banks in terms of lower transaction and delivery cost and so is advantageous to its customers through:

- 1. Saving of time and travel.*
 - 2. Operating volume transactions from the comfort of home.*
 - 3. Any bank, any branch transferring of funds within seconds through IMPS.*
- With innovative technology money apps and Mobile Banking is the order of the day.*

Introduction

Gone are the days when a customer did all of their business in a branch. Today most customers use multiple channels to buy Banking products, manage their accounts, resolve issues and receive notifications.

History

With Nationalization of Banks (1978 – 1990) manual banking was followed. It had its own deficiencies. A customer had to necessarily operate his accounts only from the branch where he had the account. Normal transactions like cash deposits, cheque deposits, withdrawals, fund transfers and loan repayments were to be done strictly within banking hours. The clearance of cheques used to take three full days. Foreign exchange collections through bills and letter of credits used to take nearly four days for credits to be effected in the respective accounts. Now with technological know how and integration of security related softwares into Banking Industry has proved to be a success and is ongoing.

Importance of Online Banking

Today's Banking customers can interact with their financial institutions through more channels than ever and the channels selected have significant impact on "Bank Revenues" as well as "Customers Satisfaction". However measures of security is a cause of concern for the customers as lot of hacking, phishing and wrong credits take place in their accounts.

Benefits of Online Banking

Online Bill Pay

One can pay their bills online and access record of their accounting transactions.

View your Transactions

Your account history, date wise transactions from anywhere (Home computer / Mobile). This is the quickest way to check your account if any unauthorized transaction have taken place and helps you to resolve issues very fast.

Transfer money between Accounts

Your also have the option of transferring money between different banks online. This will not happen as quickly since the money still needs to go between Financial institutions, but much more convenient than running to the bank.

Mobile Banking

Most banks have a Mobile App, that allows you to take advantage of online Banking through your phone. This Mobile banking helps you to check your balance instantly while you are shopping.

Synchronising with your money Apps

Money Apps work both on your home computer and your mobile device, so you can stay updated with the latest technological advancements to suit your requirement.

Protect yourself online

It is very important to be very careful while banking online. You need make to sure that your password is long enough to prevent it from easily being hacked. Never part with any online account information to someone who is not an authorised signer on your account. Checking your credit report is useful to protect your account from identity theft.

- Avoid using “Public Wifi” when accessing your accounts online
- Follow password guidelines
- Consider changing password on a regular basis

Conclusion

I conclude to share my view that online banking provides great value in terms of convenience, customer intimacy, time saving, inexpensive and coherence in banking. Despite few disadvantages Internet banking is highly recommended along with its new technology and is gaining momentum especially through latest implementation of “Financial Inclusion” by our Government. Online Banking is growing at an accelerated speed and moving towards Digital Banking – Our Mission. Digital India! Skill India! Grow India! is our PM Modi's upcoming schemes for our Bharath!



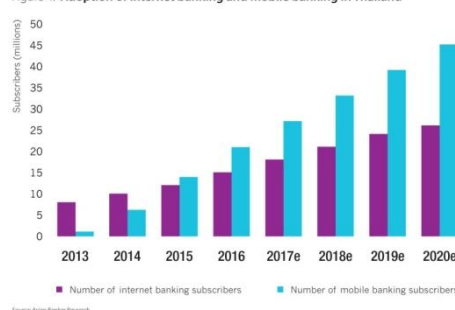
Online Banking



Advantages	Disadvantages
<ul style="list-style-type: none">□ Decreased cost of paper and postage□ Storing all statements online instead of keeping a paper copy□ Convenience□ Paying bills online□ Ability to access account anytime□ No waiting for a monthly statement	<ul style="list-style-type: none">□ Not as personal□ Not able to access without technology□ Decrease in safety features□ Increase in risk for fraud

Thailand has more mobile banking users than internet banking users

Figure 4. Adoption of internet banking and mobile banking in Thailand



A STUDY ON MODERN BANKING SERVICES – A TECHNOLOGICAL ADVANCEMENT IN BANKING SERVICES IN CHENNAI CITY

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Abstract

Banking sector plays an important role in the economic development. Banks are the most important connection in the world of money. Banks are the backbone of the Indian economy. Day by day, the banking sector is changing its way of working. Banks, all over the world have adopted electronic banking. It is not only making life easier for customer, and also employees of the bank. Almost everyone in the world uses or has used banking services. Banking industry is fast developing with the use of technologies like Electronic Clearing Services (ECS), Electronic Funds Transfer (EFT), Real Time Gross Settlement (RTGS), National Electronic Funds Transfer (NEFT), ATMs, Credit and Debit cards, Internet banking, Telephone banking, Mobile banking etc., are the numerous technologies presented in modern banking. Today, the concept of central banking has made "Any Where and any Time" banking. Banks are investing heavily in adopting of these technologies. This paper focus on how the technological advancement in banking services attracting the maintainable growth. This paper analysed the respondent preferences and usage of modern banking services in Chennai city.

Keywords: Modern Banking, Technological Advancement, ATM, Internet Banking, Mobile banking.

Introduction

Banking in these days is a flourishing industry, considering technological innovation. Banks play an important and active position in the economic growth of a country. Banking systems of any country wants to be effective, efficient and disciplined due to the fact it brings about a speedy progress within the quite a lot of sectors of the economic climate. It has now brought in E-banking, which is gradually replacing the traditional branch banking. Internet banking has emerged as the biggest focus and targetable area. Internet banking is changing the banking industry and is having a significant impact on the banking relationship. Banking industry is fast growing with the use of technology in the form of ATMs, on-line banking, Telephone banking, Mobile banking, NEFT, RTGS, etc. This growth has been strongly supported by the development in the field of technology, without which this could not have been possible. Besides it will change our lifestyle in coming years. Banks now a day's provide a wide range of services to satisfy the financial and non-financial needs of all types of customers from the smallest account holder to the largest company and in some cases of non-customers. The range of services offered differs from bank to bank depending mainly on the type and size of the bank (Vijayaragavan, T. August, 2014).

Review of Literature

Ramanpreet Kaur Nayyar (October, 2017) has examined the pattern of customers in accepting different means of electronic banking, their satisfaction level, frequency and purposes with the growth of banking sector and technology advancement. An informal conversation with bank employees of State Bank of India, Axis bank, Canara bank and Bank of Baroda it was witnessed that after demonetization the number of internet banking user has increased. **Aruna R. Shet (May, 2016)** has studied the various technological innovation in Indian banking sector. Exposure to worldwide competition and deregulation in Indian financial sector has led to the emergence of better quality products and services. Reforms have

changed the face of Indian banking and finance. The banking sector has improved manifolds in terms of Technology, Deregulation, Product & Services, Information Systems, Etc. The better the banks understands their customers, the more successful they will be meeting their needs. **Seema Malik (June, 2014)** has focused on how the technology has transformed the face of banking in India. India's banking system has seen some major financial innovations in the past decades which lead to tremendous improvements in banking services and operations and also highlights the benefits and challenges of changing banking trends. Banks have to adopt a holistic approach to fulfil the ever changing needs of customers and to grab a better market share.

Technology Has Changed the Face of Banking Industry

Banks were always regarded as a place with long queues, and an unmanageable amount of paper work. Due to technological advancements in the banking sector, the need of labour and papers has reduced a lot. Now we see branches with glass partitioned counters with computers, counting machines, fake note detection machines, Automatic Teller Machines (ATM), Self-served Kiosks (SSK), and Cash Deposit Machine (CDM) etc. Ways in which technology is making the banking industry more efficient:

1. The world at your fingertips
2. Less errors and better data protection
3. Better customer experience

Advancements in Technology and Banking Process

Period	Features / functionalities
1988-1994 (The Initial period)	Deposit of Cash Withdrawal of Cash
1995-1999 (Early Developments)	Mini Statement Balance Inquiry
2000-2001 (First Extension)	Coupon Dispensing
2002-2004 (Extended Functionalities)	Fulfilling requests from Customers (e.g. Cheque Book) Account Transfer Touch Screen Menus / Facilities
2004-2006 (Non- banking services)	Ticket Booking : Railway and Airlines Bill Payments Mobile Recharges
Future (2007 Onwards)	Cheque deposit with scanning Customized ATMs Ubiquitous Multifunction ATMs Biometric ATMs

Source: Operation & IT Articles (1st November, 2004)

New Banking Technologies in the Next 5 Years

New technology in banking is already transforming the financial world, and the traditional banking landscape is set to rapidly change in the next five years. Safety features, such as advanced cryptography and biometrics, will help protect against bank scams, and remote applications will make it easier than ever to do your banking without ever visiting a branch, the experience is likely to be much more customer-friendly (John Csiszar, March 22, 2017). They are:

1. Block chain technology
2. Upgraded ATMs
3. Proliferation of non-banks
4. Apple store-style experience
5. Automated financial services employees
6. Mobile and Digital banking

Table 1 (Percentage of Respondent)

	Preference on Mode of Banking				Usage of Services in Last 6 Months			
	Online Banking	Phone Banking	Mobile Banking	Direct Banking	ATM	Internet	Phone	Mobile
Yes %	72	11.5	74.5	68	62	85	15	94
Some What %	17.5	6.5	13.5	20.5	33	10	9.5	4
No %	10.5	82	12	11.5	5	5	75.5	2

Inference

From the above table it can be inferred that and about 74.5% prefer mobile banking and 72% of the respondents prefer online banking after the demonization in India. 68% of the respondents used direct banking. About 94% of the respondents have used mobiles transactions in the last 6 months and 85% have used internet. ATMs are used by 62% of the respondents only due to the ATM transaction charges and free usage limit. It also reveals that most of the respondents do not opt for phone banking.

Objective of the Study

- To study the importance of Modern banking services.
- To understand the technological advancement in banking services.
- To analyse the preference and usage of technology in modern banking services.

Research Methodology

Primary and secondary data has been collected for this study. Secondary data has been collected from various sources like online journals, books, articles, and internet. Purposive quota sampling has derived from non-probability sampling method to select respondent who have bank accounts in Chennai city. The researcher had collected 100 respondents from the total population of Chennai city. For this study data is collected through a structured questionnaire. Percentage analysis has been used for interpretation.

Statement of the Problem

Effectiveness of modern banking services and technological advancement.

Limitation of the Study

This study is restricted to only the respondents who have bank account in Chennai city. This study has taken only 100 respondents for this survey. This study shows only the respondent's preferences and usage of modern banking services.

Conclusion

Today banking is known as innovative banking. Internet banking is highly comfort in our routine life, in fact this made our life simple and convenient and over all we are able to enjoy quality service

smartly. The overall study shows that the respondents were willing to use more modern banking services like the online banking, mobile banking etc.

Suggestions

1. Banks should take steps to attract more number of customers to use modern banking services.
2. Banks should ensure more safety measures to the e-transactions.
3. Charges should be levied for e-banking transactions or charges should be kept within the bearable limit of the customers.

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A CONCEPTUAL STUDY ON GROWTH AND IMPACT OF INTERNET BANKING AND TECHNOLOGY IN INDIAN BANKS

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Abstract

The Internet Banking is changing the banking industry and is having the major effects on banking relationships. Internet Banking involves delivery of banking products and services. This paper describes the current state of Internet banking in India and discusses its implications for the Indian banking industry. This research paper focuses on the impact of internet banking and technology in Indian banking sector. Without information technology and communication we cannot think about the success of banking industry. This paper identifies the weaknesses of conventional banking and explores the consumer awareness, use patterns, satisfaction and preferences for Internet banking and also highlights the factors that may affect the bank's strategy to adopt Internet banking.

Keywords: Internet banking, latest technology, impact, growth, Indian banks.

Introduction

Internet Banking refers to the banking services provided by the banks over the internet. Some of these services include paying of bills, funds transfer, viewing account statement, etc. Banks also deliver their latest products and services over the internet. Internet banking is performed through a computer system or similar devices that can connect to the banking site via the internet. Nowadays, you can also use internet banking on your mobile phones using a Wi-Fi or 3G connection. With the ease of availability of cyber cafes in the cities, it has become quite popular. Banking is now no more limited in going and visiting the bank in person for various purposes like depositing and withdrawing money, requesting for account statement, stop a payment, etc.

Services of Internet Banking

Banks in India are offering wide range of their services and their products through internet banking. Some of the major services and products in India are:

- Provides account statement (account info), Balance enquiry, balance statement and transaction reports used.
- Transfer funds between accounts, even if they are in different branches or cities.
- Banks Bill Payment is the easiest way to manage bills. Account holder can pay their regular monthly bills i.e. telephone, electricity, mobile phone, insurance etc. at anytime, anywhere for free. Saves time and effort.
- Can electronically submit a request for Cheque-book, Stop payment instructions, Opening a fixed deposit, Opening a recurring deposit, Intimate for the loss of ATM card etc.
- Demat is commonly used abbreviation of "Dematerialisation", 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.

Review of Literature

Balwinder Singh and Pooja Malhotra (2014) This paper concluded that, by the end of first quarter, 2004, differences between Internet and non-Internet banks had begun to emerge in funding, in sources of income and expenditures and in measures of performance.

Vikas Chauhan and vipin Choudhary (2015) The present paper attempts to understand the concept of internet banking as well as study the benefit of internet banking from perspective of consumers as Well as banks. Further, this paper discusses the challenges and opportunities associated with the internet banking in Indian context.

Objectives of the Study

- To Study the impact of internet banking
- To analyze the impact of IT in Indian banking industry.
- To assess various aspects of IT services provided by Indian banks.

Research Methodology

The present study is based on the secondary data collected from different journals, magazines, sites and published data from various issues of RBI and different Public sector banks. Various studies on this subject have also been referred in this study.

Benefits of Internet Banking In India

1. **Easy to Set-up:** Internet banking permits to easily set up your online accounts with only prior bank account information. You can use your computer or even smart phones for creating your online accounts.
2. **Secure:** Online banking allows you to conduct your bank transactions safely and securely. You can monitor and keep track of all your financial transactions and make sure your balance information is correct.
3. **Convenience:** Internet banking gives you a platform for paying your electric bills, telephone bills and transfer funds. Making transactions right from your door step or offices are easy with single payments or recurring payments.
4. **Services:** Internet banking acts as a great medium for the banks to endorse their products and services. These services include financial planning, investment options, loan calculators and many others as simple applications on the bank's website. All these services are available 24/7.
5. **Cost-Effective:** Administrative and paper related works which occupies not only office spaces but as well creates job opportunities have been cut down with the introduction of internet banking.

Recent it Trends of Indian Banks

Today, technology is not only changing the environment but also the relationship with customers. This has brought customer relationship into greater focus.

Electronic Payment and Settlement System: The most common media of receipts and payment through banks are negotiable instruments like cheques.

Automated Teller Machine (ATM): ATMs were introduced to the Indian banking industry in the early 1990s initiated by foreign banks. It is perhaps most revolutionary aspect of virtual banking.

Phone Banking: Customers can now dial up the banks designed telephone number and he by dialing his ID number will be able to get connectivity to bank's designated computer

Internet Banking: Internet banking enables a customer to do banking transactions through the bank's website on the Internet

Mobile Banking; Mobile banking services are provided to the customers having the credit card accounts with bank.

Summary and Conclusion

Internet banking requires that the banks' internal systems to be linked with the systems in public domain. Internet Banking is susceptible to risks in the form of criminal activities, such as fraud, money laundering, tax evasion etc. Internet banking allows the banks as well as customers to operate with geographical boundaries thus creating a problem of exchange controls. Reserve Bank of India has come out with Internet banking related guidelines. Thus Internet banking has become a necessary survival weapon and is fundamentally changing the banking industry worldwide.

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CHALLENGES AND BENEFITS OF MOBILE BANKING

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Abstract

Technology plays an important role in banking sector. Banking is one of the largest financial institutions that constantly explore the opportunity of technology enabled services to provide a better experience and convenience to the banking customers. Mobile banking is a service which is provided by the bank or other financial institution to assist its customers to carry out their financial transactions using mobile devices. The increased ubiquity of mobile phones has provided exciting opportunities for the growth of mobile banking (m-banking) in India. However, mobile banking is not chosen by many of the people. The study brings out the benefits and challenges of mobile banking. For the purpose of research and for understanding, a sample size of 104 has been used in the study. T-test and Friedman test are statistical tools used for the study.

Keywords: *Mobile banking, Challenges, Problems, Benefits and Banking Services*

Introduction

According to the Internet and Mobile Association of India (IAMAI) & market research firm IMRB, the number of mobile internet users in India is estimated to reach around 420 million by June 2017 with the rural India growing at a much higher rate than urban India. With the growing needs and expectations of the customers, the banks started providing various services which could ease the operational process for the customers as well as for the bankers, one such service provided by the bank is mobile banking. Mobile banking is a service provided by a bank or other financial institution that provides its customers a platform to conduct transactions remotely using a mobile device. Contrary to internet banking it uses software called an app which is provided by the financial institution. Mobile banking is usually available on a 24hrs basis. The earliest mobile banking services used SMS, a service known as SMS banking. With the introduction of smart phones with WAP support enabling the use of the mobile web in 1999, the first European banks started to offer mobile banking on this platform to their customers. A number of things can happen on mobile detection such as redirecting to an app store, redirection to a mobile banking specific website or providing a menu of mobile banking options for the user to choose from.

Review of Literature

Rugimbana (1995) found that there is greater scope for mobile banking due to its anytime/anywhere functionality and the option to do banking virtually any time and anywhere. Clark (2008) suggests that as a channel the mobile phone can expand the number of channels available to consumers by giving them self-service options at more low-cost. Customers can easily access to funds, banking information and make payments. Mobile banking delivers convenience, immediacy and choice to consumers. Prerna Sharma Bamoriya and Preeti Singh (2011) found out that majority of the customers were indifferent towards utility of mobile banking in comparison to retail banking and online banking. Dr. K.Kavitha (2015) has found out that mobile banking is a convenient financial service to the Customers. The paper

also discussed the major issues faced by the customer & banking Sectors through mobile banking services and suggested an idea for protecting the account information from unauthorized persons through Mobile Banking Supervising System.

Objectives

1. To bring out the benefits of mobile banking.
2. To identify the problems and challenges of mobile banking.
3. To suggest remedial measures to improve the mobile banking services and to overcome the problems faced by customers due to mobile banking.

Hypotheses

1. There is no significant difference between gender and benefits of mobile banking.
2. There is no significant difference among mean rank towards problems and challenges of mobile banking.

Analysis and Results

Table 1 T-Test for Significant Difference Among Gender and the Benefits of Mobile Banking

Particulars	Female		Male		t value	p value
	Mean	SD	Mean	SD		
Anytime/Anywhere banking	3.2368	1.30351	3.5909	1.16325	1.403	0.156
User friendly	3.5263	1.37028	3.7121	1.22494	0.713	0.535
Provides various banking services	3.2632	1.00497	3.6667	0.86528	2.158	0.033*
Safe and secure	3.9211	0.94101	3.5758	1.12401	1.598	0.113
Time saving	3.2895	1.11277	3.4848	0.78920	1.043	0.299
Transaction details available through Mini statement	3.5263	1.17948	3.5909	1.03741	0.291	0.772
Fraud reduction	3.2368	1.10121	3.4848	1.14007	1.081	0.282

Source: Primary data

Notes: * denotes at 5% level.

Inference

Table-1 indicates that since p value is less than 0.05, the null hypothesis is rejected at 5% level with regard to 'provides various banking services'. Hence there is significant difference between male and female with regard to 'provides various banking services'. Based on mean score, female customers feel the factor 'provides various banking services' more beneficial than male customers. There is no significant difference between male and female with regard to 'Anytime/Anywhere banking', 'User friendly', 'Safe and secure', 'Time saving', 'Transaction details available through Mini statement' and 'Fraud reduction'. Since p value is greater than 0.05.

Table 2 Friedman Test for Significant Difference among Mean Rank towards Problems and Challenges of Mobile Banking

Particulars	Mean Rank	Chi Square Value	p Value
Security problem	2.09	3.454	0.178
Performance problem	2.05		
General and management issued	1.86		

Source: Primary data

Inference

Table-2 indicates that since p value is greater than 0.05, the null hypothesis is accepted. Hence, concluded that there is no significant difference among mean rank towards problems and challenges of mobile banking. Based on mean rank, the security problem (2.09) is the most challenging problem of mobile banking faced by the customers, followed by performance problem (2.05) and general & management issues (1.86).

Suggestions

Mobile banking app should be easy to use by the customers. There should be a more secure login process and also the problem of login or similar issues should be dealt with efficiently and effectively by the banks otherwise it will simply make the customers to forgo the mobile banking option and return to standard practices. Customers should also avoid using public Wi-Fi, regularly monitoring banking records and setting up daily alerts to track account activity which are among other security measures. It should set a standard for mobile banking customers for handling grievances of the customer.

Conclusion

Technology plays an important role in banking sector. Mobile banking offers various benefits such as convenience, ease of use, time saving, fraud reduction etc. But still it has some limitations. Banks should provide attention in dealing with the problems faced by the customers due to mobile banking. The security problem is the most challenging issue of mobile banking faced by the customers. Mobile banking should be safe and secure for the customers to choose banking through mobile.

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JEWEL LOAN PROVIDED BY NATIONALIZED BANKS IN THANJAVUR DISTRICT

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Abstract

Banking sector is backbone of economy of a nation. Agriculture development implies not only a growth in farm productivity, but also improvement in the general economic condition of the rural masses. In the present study effort in to the jewel loan satisfaction level of customer to bank located in Thanjavur District.

Keywords: Banks, Jewel loan, Agriculture,



Introduction

Finance is the life blood of every economic activity and it is supplied by the banks. The financial assistance provided by the banks must be uniform and rational otherwise there will be haphazard development of the country. The flow of credit is very much like the circulation of blood. The credit is very much like the circulation of blood. The credit should flow steadily and evenly through various sectors of economy. If credit flow is artificially plugged or arrested, it would do irreparable harm to the economy.

The success of economic development depends upon heavily on the extent of mobilization of resources and investment on productive activities of the economy. Bank credit can play a significant role by influencing the type of industrial and agricultural output. The approach to granting credit has been diversified from security to productivity.

The Banking sector, from the point of view of the uniformity in policies, practices, organization setup, mode of operation etc., may be classified into organized and unorganized sectors. The organized sectors of banking system consist of the reserve Bank of India, state Bank of India, Nationalized Banks, private scheduled Banks, Co operative Banks etc. The unorganized sector of the banking system consists of indigenous bankers, money lenders, chit funds, etc.

The banks in organized sector accept deposit under different categories, lend money for different purposes, and make a profit margin to meet its cost of service loans.

Different lending operations

Various loans are disbursed to poor villagers, artisans, and self employed persons of, these. The amount disbursed to the villagers is of important one. They are short term production loan, crop loan, Jewel loan for Agriculture, Jewel loan for other purposes. Integrated rural Development programme loan etc.

Special schemes are intended for scheduled caste, tribes people particularly for these are relieved under the rigorous implementation of 20 point programme by lower rate of interest at the rate of 4% under the head of differential rate of interest for rural works. Those who are ready to open small industries in rural areas.

Objective of the Study

- To study the jewel loan procedure adopted in nationalized bank, Thanjavur branch.
- To analyze the quantum of jewel loan provided by the branch.

Statement of the Problem

The Thanjavur District is one of the educated, populated and agriculture oriented towns of the district. More than hundreds of villages are there in around Thanjavur. Therefore, farmers are in monetary needs to do cultivation. It may be suggested that the aforesaid facts influenced and inspired to make study on this head.

Methodology

This paper is mainly based on secondary data. The secondary data is collected from various records, audit reports and books maintained by all Nationalized Banks at Tanjore. However, to support or to compare the data of these Banks, suitable literatures have been collected from relevant journals. Above all, personal interviews with branch Managers, officers and Authorized officials of Nationalized Banks, have been made.

General principal of secured Advances

Adequacy of Margin

The word “Margin” has special means of any significance in the banking business. In banking terminology “Margin” means the different between the market value of the security and the security and the different between the market value of the security and the amount of the advances granted against it.

Marketability of Securities

Advances are usually granted to short periods by the banks because their deposits resources are either repayable on demand or at short notice.

Documentation

Documentation means that necessary documents are prepared and signed by the borrower at the time of securing a loan from the bank.

Realization of the Advances

If the borrower defaults in making payment the banker may realize his debt from the sale proceeds of the securities pledged to him. If the banker is unable to recover his full dues from the sale proceeds, he shall file a suit for the recovery.

Discharge Procedure

At the time of discharge of jewel loan the borrower has to give a letter of receipt of the ornaments to the Manager. The Manager will hand over the jewel after verifying the validity of the borrower's ownership on the jewel by means of personal enquiry.

Principle and practices of jewel loan

The jewel loans provided by nationalized banks are classified into two heads viz.

1. For Agricultural purpose
2. For Non – agricultural purpose

Agricultural jewel loan are provided for the following purpose

1. To purchase fertilizer, manure, pesticides, seeds etc.
2. For meeting other cultivation expenses
3. For the purchase of form and non – form equipments.

Non – Agricultural jewel loans are provided mostly for improving the standard of living of people. It also serves for the development of small – scale industries in this area.

Terms and condition of lending

As ornaments pledged shall be kept, not the risk of the borrower, the bank, exercising only the ordinary care of safe custody. The bank shall not be made liable for any loss due to destruction, deterioration or damage to the articles by the Act of God.

- a. The borrower shall maintain a margin specified by the bank on the value of ornaments and in case of fluctuations of price of gold or accrual of interest, the bank may demand repayment to cover the margin on one week notice.
- b. The bank shall be entitled to revalue the ornaments at any time and if the borrower does not present himself at the bank for the purpose on receipt of notice sent to him, bank may proceed to do the same in his absence.
- c. The bank shall receive part – payment of the loan but the delivery of ornaments can be obtained only on repayment in full principle, interest and notice charges.
- d. If the advances is for agricultural purpose. the borrower to repay the loan in full with interest at the office of the bank within the due date and in default of such payment, the bank will be entitled to sale the ornaments at the risk of the borrower either by public auction or by private contract after giving due notice of the sale to the borrower. In case of deficit if any, the bank shall have the right to recover the same from the borrower personally.
- e. A letter sent by ordinary post addressed to the borrower, to the address given to him, to the bank shall be sufficient notice to him.

Conclusion

Provision of loans on the pledge of jewel serves to bridge the credit gap in the context of debt relief legislation and consequent shrinkage of credit from non – institutional sources with the issue of jewel loan through nationalized banks spread over the entire taluk mostly in rural areas. The banks are effectively meeting the emergent credit needs of the weaker section of the population. Thus the banks made a significant contribution in protecting the interest of the vulnerable section particularly the forming community. The achievement made by the nationalized banks in this regard is note worthy.

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INCLINATION, ADAPTATION AND ISSUES REGARDING DIGITAL PRODUCTS & SERVICES

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Abstract

The Indian banking system has changed from the traditional way in providing the service to the customers into digitalized form where all the transaction are fulfilled in a minute. As the technology develops each day, Indian banking system adopts the latest upgradation and technology to make use of online banking, telephone banking, mobile banking, ATM, CDM, passbook entry machine. The present study is to examine customer's preference in utilizing the digital products and the problems faced by customers.

Keywords: Upgradation of Indian Banking, Customer's preference, utilization of Digital Products and Problems faced.

Banks operation today is becoming globalized, liberalized and competitive with other banks. In order to survive banks need source from Information Technology sector, which gave rise to Electronic banking a remarkable changes in the banking industry. E-banking is a generic term making use of electronic channels through telephone, mobile phones, internet, machines such as Automatic Teller Machine (ATM), Cash Deposit Machine (CDM), Passbook Entry Machine, etc. to provide banking services and products.

Evolution of E- Banking

Initially e-banking was started in UK and USA in 1920, becoming popular on credit cards and electronic fund transfer. Later in 1980 the concept of web-based banking came into force in Europe and USA. Financial institutions commenced to implement e-banking services in the mid 1990's where many consumers hesitated to transact using the web. India's traditional banking was on the basis of branch banking, in the period of 1990 non-branch banking services was started. The credit to start up e-banking in India goes to ICICI followed by Citi bank and HDFC to start up with the services by 1999. The Government of India enacted the IT Act, 2000 provided legal recognition to electronic transfer and other means of electronic transactions. Reserve bank of India monitor and review legally the requirements towards e-banking on a continuous basis.

Need for the Study

Modern banking services has been developed to match the latest needs of common public. To be benefited with the latest digital services one should know how to use it in a better manner by self, if not approaching for help might lead to fraudulent practices. The study is focused to analyse customer's preference to utilise the digital products or visit bank to complete their work and the problems faced.

Review of Literature

Singhal and Padhmanabhan (2008), established that usage of Internet banking is increasing because of convenience and flexibility. The study aimed to explore the major factors such as utility request,

security, utility transaction, ticket booking and fund transfer being the for the usage internet banking. The researcher found that more than 50 % agreed that internet banking is convenient and flexible and it also possess various transaction related benefits.

G. Sreearathi (2013) studied the Performance Efficiency of Nationalized Banks of India. Only 21% of banks are relatively efficient based on the input oriented technical efficiency. By using Constant return to scale and variable returns to scale methodology for a period of 2007-2012, it's found that SBI has been ranked as 12th.

Objectives of the Study

1. To analyse customer's preference in utilizing the digital products.
2. To figure out the problems faced in using the digitalized banking services.

Research Methodology

The study is descriptive in nature, data being collected by personal interview and circulating questionnaires towards the bank customers of various bank account holders. Secondary data were collected from companies' websites, newspaper reports, technical and trade journal. Customers of various bank account holders of India within Chennai location. The study was carried out basically in three divisions of Chennai. The research was carried out considering Chennai North (30 respondents), Chennai South and East (21 respondents) and Chennai West (49 respondents). All Current, Savings, Fixed and Recurring deposit holders of various bank of India in Chennai. Stratified random sampling technique was used. Data were collected from 100 respondents in Chennai.

Analysis and Interpretation

Analysis of Objective 1 (Significant level at 95%)

Ho: There is no significant difference between demographic data towards customer's preference to visit bank to complete their work even after the initialization of digital products.

H1: There is a significant difference between demographic data towards customer's preference to visit bank to complete their work even after the initialization of digital products.

Table 1 Anova Calculation between Demographic Data towards customer's preference to visit bank after the initialization of digital products

Serial No	Variable	P value	Result
1	Age	.036	$p = .036 < 0.05$ (Null Hypothesis is rejected)
2	Gender	.824	$p = .824 > 0.05$ (Null Hypothesis is accepted)
3	Educational Qualification	.166	$p = .166 > 0.05$ (Null Hypothesis is accepted)
4	Area of Location	.339	$p = .339 > 0.05$ (Null Hypothesis is accepted)
5	Employment Status	.376	$p = .376 > 0.05$ (Null Hypothesis is accepted)

Source: Primary data compiled by the scholar

Interpretation

Table 1.1 depicts the results of Anova test performed to test the demographic data towards customer's preference to visit bank to complete their work even after the initialization of digital products, where people use the digital products on a higher basis except old aged people. The significance value of Age ($p = .036$) is below 0.05 therefore, there is a statistically significant difference between the age and customers preference level to visit bank. Old aged people are not engaged to adapt the digital services, where they still visit bank in order to complete their work. The significance value of Gender ($p = .824$), Educational Qualification ($p = .166$), Area of Location ($p = .339$) and Employment Status ($p = .376$) are

above 0.05 hence, there is no statistically significant difference between these demographic data and customers preference level to visit bank.

Problems Faced in Usage of Digital Products

1. First and foremost digital product that got initiated was ATM come debit card with certain limit to withdraw and restrictions to use in a bank where they possess account only, later it came up with the feasibility of using it in any other banks' ATM up to 5 transactions with no service charge beyond that service charge were applicable. Apart from this many have lost their money too, by cunning persons who track the details of high net worth individual's bank account and take away the money without their knowledge.
2. Next banks came up with internet banking facility for customers to handle their account from their desktop at their convenient place, security issues arose, technology upgradation where people lacked to handle it without any support or training, power supply i.e., lack of proper net connection from customer's side to use internet banking. Due to lack of security issues people account details were tracked and the concept of personal banking was not efficient.
3. As technology is developing to make the banking services to be more personal bank application was promoted to use from individuals' smart phone. Proper support and maintenance lacked from bank side where certain bank apps had some restriction like if people change phone and use the app it's not been supported, again the registration process has to be done from first, transfer limit in mobile banking is restricted for e.g. in SBI maximum limit is Rs 5000 for every person. Upgradation of bank app makes inconvenient to register again, where people hesitate and some fail to use the mobile banking facility.
4. In using Cash deposit machine, issues arise like exact credit has not taken place in their account, money gets tore, lack of training given to handle it in proper way, after each credit a SMS to reach the customers' contact number is not regular, where the customer need to go to bank to check whether the amount has been credited or not.
5. People lack in using the Passbook entry Machine correctly, by wrong use either the book is torn, the print is over printed i.e., the print over the printed page, etc. Customer's account details are been tracked in using the machine, so some prefer to go to bank personally and get in printed.
6. When a request is been given from internet banking such as Mobile number change, request for new fixed or recurring deposit, registration of mobile banking, request for demand draft and other services, the system say to meet the home branch to get the authorization form bank employee to process it. For this type of dealing, the customers think that we would directly reach bank and complete the process rather using the digital system and them finally it makes us to refer the branch to complete the process.

Limitation of the Study

1. The data were collected randomly from all type of bank account holders where the study was not confined to figure out particular bank account holders to get more realistic data.
2. The sample size is limited to 100.
3. The study is subjected to the limitations of Stratified random sampling.

Suggestion

1. It is the duty of the bank staff to spread their customers regarding the usefulness and the need for using the digital products by explaining the benefits and the limit of withdrawal and all precautions must be said in before in hand of using them.

2. In order to satisfy their customers the rectification process of all digital system must be done on time.
3. Customers themselves must have interest to gather information about the upgraded digital products to use in an efficient manner.

Conclusion

An increasing trend in technology in all industry giving new outlook and support the industry to be a competitive one. Likewise in banking industry Indian Government keeps on changing the working scenario of all banks in India into a digitalized banking in order to sustain among the competitive private banks. The findings of the study indicate that there is a statistically significant difference between the age and customers preference level to visit bank. Old aged people are not adapted to use the digital products that are available, so they prefer to visit bank to complete their work. There is no statistically significant difference between other demographic variables and customer's preference level to visit bank.

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