Volume No 03, Special Issue No. 01, March 2015

EMERGING OPPORTUNITIES & CHALLENGES OF TOM IN E-BANKING SYSTEM OF INDIA

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ABSTRACT

E Banking in India is still in progress of growth and development. Competition and changes in technology has changed the face of Banking. The changes that have taken place to impose on banks tough standards of competition and compliance. Electronic banking is the use of computer & computer networking to retrieve and process banking data and to initiate transactions directly with a bank via a Internet system. In other words-banking system is the wave of future. E Banking is likely to bring host opportunities as well as poses new challenges for authorities in regulating and supervising the financial system and in designing and implementing the macroeconomic policy. This paper aims to focus on Total Quality Management system on Emerging E-Banking opportunities & challenges in India.

Keywords: E-Banking, Retrieve & Process Data, Internet System, Total Quality Management System.

I. INTRODUCTION

The Banking sector in India has experienced a rapid transformation. Internet banking (or E-banking) means any user with a personal computer and a browser can get connected to his bank -s website to perform any of the virtual banking functions. In internet banking system the bank has a centralized database that is web-enabled. All the services that the bank has permitted on the internet are displayed in menu. Any service can be selected and further interaction is dictated by the nature of service. Once the branch offices of bank are interconnected through terrestrial or satellite links, there would be no physical identity for any branch. It would a borderless entity permitting anytime, anywhere and anyhow banking. The network which connects the various locations and gives connectivity to the central office within the organization is called intranet. These networks are limited to organizations for which they are set up. SWIFT is a live example of intranet application.¹

The Reserve Bank of India constituted a working group on Internet Banking. The group divided the internet banking products in India into 3 types based on the levels of access granted. They are:

- i) Information Only System: General purpose information like interest rates, branch location, bank products and their features, loan and deposit calculations are provided in the banks website. There exist facilities for downloading various types of application forms. The communication is normally done through e-mail. There is no interaction between the customer and bank's application system.
- **ii)** Electronic Information Transfer System: The system provides customer- specific information in the form of account balances, transaction details, and statement of accounts. The information is still largely of the 'read only'

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format. Identification and authentication of the customer is through password. The information is fetched from the bank's application system either in batch mode or off-line.

iii) Fully Electronic Transactional System: This system allows bi-directional capabilities. Transactions can be submitted by the customer for online update. This system requires high degree of security and control. In this environment, web server and application systems are linked over secure infrastructure.²

The private and foreign banks brought new technologies and rendered technology based world class quality services to customers through ATMs, credit cards and internet banking, which Public sector banks, were not even dreamed about. By offering world class quality services, these banks started snatching customers from Public Sector banks and they felt the heat and realized that if they do not follow the path of these banks, they would be thrown out from the banking scene within no time.

II. OBJECTIVES OF THE STUDY

- The primary objective of the research paper is to get the full acquaintance of the various internet banking services provided by banks
- To discuss the Opportunities and challenges for E-banking in India.
- To focus on Total quality management System of the various internet banking services provided by banks.

III. THEORETICAL BACKGROUND

The Banks are the most significant players in the Indian financial market because they are the biggest purveyors of credit and attract most of the savings from the population. Banking plays very important role in the economic development of all the nations of the world because a developed banking system holds the key as well as serves as a barometer of economic health of a country.³

Online banking services provided by banks are as follows -

- a) Core Banking Solution (CBS)
- b) Automated Teller Machine (ATM)
- c) Electronic Fund Transfer (EFT)
- d) Real Time Gross Settlement System (RTGS)
- e) National Electronic Fund Transfer (NEFT)
- f) Mobile Banking (M-Banking)
- g) Magnetic Ink Character Recognition (MICR)
- h) Electronic Clearing Services (ECS)
- i) Plastic Cards (Credit Card, Debit Card & Smart Cards)
- j) Cheques Truncation Payment System
- E-Banking: E-banking allows customers of a financial institution to conduct financial transactions on a secure web website operated by the institution, which can be a retail or virtual bank, credit union or building society. Electronic or online banking is the latest delivery channel to be presented by the retail banks and there is large customer acceptance rate which means delivery of banking services to customers using electronic technology either at their office or home.

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ISSN (online): 2348 – 7550

• Core Banking – Core Banking is a general term used to describe services provided by a group of networked bank branches.

- ATM (Automated Teller Machine) ATM is a Computerized machine that permits bank customers to gain access to their Accounts with Magnetically encoded plastic card & a Code number. It enables the customer to perform several banking operations without the help of Teller such as to Withdraw Cash, Make Deposits, Pay Bills, Obtain Bank Statements & Effective Cash Transfer.
- Plastic Cards (Debit, Credit & Smart Cards) Plastic Cards have gained greater acceptance & Momentum as a Medium Financial Transaction. Credit Card provides Cash Free & anywhere and anytime shopping to the Customers but with fixed limit prescribed by Banks. Debit Card, unlike Post-paid Credit Card, is a Pre-paid Card with some Stored value.
- Electronic Fund Transfer (EFT) EFT is another E-Banking Product facilitating Transfer of Funds from any Branch of a Bank to any other Branch of any Bank in Shorter Time. Before EFT's, intercity transfer of Money for the Customer was made through Demand Drafts, Mail Transfers & Telegraphic Transfers.
- Mobile Banking Mobile Banking is an extension of application such as Phone Banking & Online Banking. It can be defined as a channel where by Customers interacts with a Bank through a Mobile Device, e.g. Cell Phone.
- Real Time Gross Settlement System (RTGS) It provides for an electronic based Settlement of inter Bank & Customer based transactions, with Intraday Collateralized liquidity support from RBI to the participants of the system.

IV. OPPORTUNITIES FOR E-BANKING SYSTEM IN INDIA

Information technology revolution has converted the world into a global village. The thinking, structure, work-culture and functioning styles are changing on hour basis. IT has created tremendous job opportunities for the people around the globe as well made the organizations efficient and productive. There has been an IT revolution in the world in the last 40 years. This revolution has altered the way we work and think. It has touched every enterprise, sector, society and government where banking is the most triggered area. IT has created tremendous job opportunities for the people around the globe, and has made the organizations efficient and productive. In most of the developed countries like USA, it has contributed to half of the productive growth and a third of the economic growth over the last five years. In India most of the organizations have already deployed IT to transform their processes.⁴

The opportunities of e banking can be analyzed from the viewpoint of customers, banking organizations and economy in general. Recent developments have introduced a plethora of opportunities for development in banking industry. IT as an enabler has broken all bounds of cost, distance and time.

4.1 Opportunities for Customers

General banking customers have been significantly affected by the advent of e-banking revolution.

- a) A banking customer's account is extremely accessible with an online account.
- b) Through internet banking customer can operate his account remotely from his office or home. The need for going to bank in person for every single banking activity is dispensed with.
- c) Internet banking lends an added advantage towards payment of utility bills. It eliminates the need to stand in long queues for the purpose of bill payment.

International Journal of Advanced Technology in Engineering and Science

www.ijates.com

ISSN (online): 2348 – 7550

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- d) All services that are usually available from the local bank can be found on a single website.
- e) Sharp growth in credit card/debit card usage can be majorly attributed to e-banking. A customer can shop globally without any need for carrying paper currency with him.
- f) By the medium of e-banking (including internet banking), banks are available 24x7 and are just a mouse click away.

4.2 Opportunities for Banking Sector

In addition to banking customers, growth of e-banking infrastructure in general and online banking in particular has proved to be extremely beneficial to banks and overall bank organizations on account of following:

- a) The concept of online banking has immensely helped the banks in putting a tab over their specific overheads and operating cost.
- b) The rise of internet banking has made the banks more competitive. It resulted in opening of better prospects and avenues for banking operations.
- c) The online banking has ensured transparency of transactions and facilitated towards removing the documentation requirements to a major extent, since majority of records under an e-banking set up are maintained electronically.
- d) The reach and delivery capabilities of internet-enabled banks, proves to be significantly better than the network of physical bank branches.

V. MAJOR CHALLENGES TOWARDS E-BANKING SYSTEM IN INDIA

E-banking in India is in its earliest stage of development. Most of them are basic services only the deregulation of e-banking industry coupled with the emergence of new banking technology is enabling new competitors to enter the financial services markets quickly and efficiently. However it needs to be recognized that perception norms and an improvement in functioning of e-bank.

In today's cyber world where when people do not have much time even for their personal work, E-Banking appears as a boon. Internet banking has become very popular in the recent years, as it is quick and easy. Though E-Banking provides more advantages than traditional banking however, it has some disadvantages too which are as listed:

- Setting up an account in the bank may take time though the E-Banking facility is provided by the banks.
- Internet account of customer with an Internet Service Provider (ISP) which may be another hectic experience.⁵
- Banking sites can be difficult to navigate at first by the customers who do not have knowledge of computer
 and internet so getting acquitted with the banking sites software may require some time to read the tutorials
 in order to become comfortable in persons virtual lobby. There may be some difficulties to the customer for
 learning these activities of E-Banking.
- Some alterations or changes made in the banks sites due to technological advancement may lead to a problem to customers who have to provide all the personal information once again through online transaction.
- E-Banking is time consuming for the customers, though there is option of online transactions, in the end customers have to run to the ATM for withdrawing the cash.⁶
- No personal contact with any of the bank staff, and if talk to any bank staff through the telephone, there is no guarantee to the customers that they had talked with a right person or not.

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sue No. 01, March 2015 ISSN (online): 2348 – 7550

- "Hackers" who may access customer's bank account is the main disadvantage to the customers who takes E-Banking facility very casually.
- Security concern is the important issue as cybercrimes activities are clutching up which decreases the number
 of customers to avail the benefit of E-Banking.
- Technical breakdowns where online banking websites sometimes go down. If this happens then, if customer wishes to close his bank account then he will definitely go penniless.
- Switching banks due to technical faults can be a major disadvantage of using E-Banking system to the customer.
- Increasing online frauds and attacks i.e. Trojan horse (Remote Attacker) are a major disadvantage of using E-Banking.
- However, in the case of Internet banking, one will find oneself making endless calls to the customer service
 department. There have been cases, where the person is put on hold or has been passed around from one person to
 another.
- Hackers and crackers attack on the bank account of customer by stealing passwords or using fake credit cards to cheat a person which will cause loss to the customer's wealth.
- Risk Involved In Using E-Banking: E-Banking poses some different risks as compared to the traditional banking. These risks are more pronounced in the case of Internet banking. Firstly, the risk of technological changes has to be carefully watched. This is essential to update technologies and remain cost effective and customer friendly. The banks have to be careful about risks involved in agreements with third parties. The security is an important area of risk. In fact it will be very crucial for the expansion of Net Banking. Another important area will emerge out of cross-border implications as 'E- Banking' breaks the geographical boundaries. Imposing regularity conditions on such transactions will be a difficult task.

5.1 E-Banking Frauds

Fraudsters are continuing their switch from traditional card fraud to raiding online bank accounts. According to the new research Fraud losses on UK credit and debit cards totalled £440m in 2009 – a drop of 28% compared with the previous year – the UK Cards Association said. But the number of "phishing" attacks rose by 16% in the same period. This is when fraudsters trick people into entering their personal details on a website or in e-mails. As there is expansion in the illegal activities of the hackers, crackers and Trojan horse there must be a strict law to punish such criminals. Online frauds are very common nowadays because it is easy to access or to obtain password, pin code and account number of customers by hackers. Recently there is a case which is known as 'ICICI Bank Fraud Case' where Rs/- 150000 was stolen by the person's bank account and it was a heavy loss of money to the account holder though the complaint was filed by the account holder but banks are still silent on that issue as banks too have no idea how these activities are taking place.⁷

5.2 Preventive Measures

As E-Banking is an important aspect for the bankers and customers as well, there must be some measures and policies which should be adopted by the banks before providing E-Banking facilities to the customers which can be taken as precautionary measure. A best preventive measure is that the account holder of the bank must be aware of

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increasing bank frauds and cybercrimes, and he should not give his password, pin number and credit cards number to anyone by using E-Banking facility. "As it is recognise that cards will always be targeted by criminals, so we are determined not only to continue to prevent, detect and deter those who are behind this type of crime, but also to make sure that innocent victims do not lose out,". There is always necessity that "Customers need to protect themselves on their computer, remaining vigilant and using go.

"A better-educated consumer is less likely to fall foul of phishing attacks" this saying has its own importance because consumer is the king with respect to the Indian trade and market but here while using E-Banking facilities a consumer need to be more careful of online frauds, so a consumer must take some necessary precautions while opting out for E-Banking facilities.⁸

Major Focus point in this paper "How we implement the Total Quality Management in Banking system". TQM use to improve the service facilities which are provided by banks.

VI. TQM ROLE TO IMPROVE OF E-BANKING SYSTEM IN INDIA

TQM is a general term to improve the efficiency of any system. We know that our banking system is going to progress online banking or online business system. This system is very interesting, qualitative and fast processing. This system has a big change in our society. But we should not forget the basic conditions of India. Each of state have the different challenges of system. That may be the technical, social, literacy, infrastructure and political. On behalf of lot of challenges we focused on provided the facility to customer. If we go outside of the metro cities in India a lot of challenges to fulfilment of banking services. Our focus should be on the out of metro cities citizens, where are lake of resources. We can see long lines of customer on the counter of banks. Sometime long days banks are not working lake of network. No doubt, Internet system has facilitated us, but dependency is also more increase on Network and Communication System. That's way a lot we are focusing in Total management System in banking sectors. This is must for transparency of task, alternate options when network is failed, network is not connected, server is down etc. we will be observe of TQM in Banking system.

6.1 Customer Acceptance

Proper understanding of the customer is the primary aspect of the E-banking. It is known that computer literacy in India is still very low and is barrier in fast acceptance of internet. Mindset of the Indian customer needs to be changed by giving awareness about technical terms in e-banking. Even though it adopts in the fast changing technical scenario, the obsolesce of technology fast. Hence there is always shortage of skilled personal and fear of technology puts the customer away from electric delivery channels.¹⁰

6.2 Cost of Technology

In connection with Start-up cost e-banking is huge at initial level for acquiring personal computer and other equipments; oneself to do online banking is still not with reach of the middle class & upper middle class customers. The cost of maintenance of all equipments like, modem, routers, bridges and network management systems. The cost of sophisticated hardware and software and skill level of employees needed.

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In e-banking there is need of skilled employees or knowledgeable professionals to route the banking transactions through the internet. Banks can employ software application developers, database administrators and training to existing bank staff on the changing systems and procedures who can handle e-banking applications under proper supervision.

6.3 Security

A secrecy threat as circumtensive decision to cause the economic hardship to data, destruction of network resources disclosure, modification of data or fraud, denial in services and distortion of information. Providing appropriate security of using encryption techniques, implementation of firewalls and virus protection software etc.¹¹

6.4 Legal Issues

In today's bank world, legal frame work for recognizing the validity of banking transactions. Conducted through the NET is still being put in place? Information technology act provides security & legal frame work for e-commerce transactions. Information technology act or RBI suggested that criterion of Digital Signature Certification Board for authentication of electric records and communication with digital signatures.

6.5 Restricted Business

Not all transactions can be carried electronically; many deposits and some withdrawals require the use of physical services. Some banks have automated to their customers (front end) but still largely depend upon manual process (back end). It result, most of clientele or customers were restricted by lack and awareness and due to technical problems.

6.6 Transparency In Offering Services

Banks will strive to adopt best practices in corporate governance and Corporate Social Responsibility (CSR) this will enhance image and can help them to enhance their confidence of international investors. Banks much towards better corporate governance standards and adoption of uniform accounting standards and disclosure requirements

6.7 Adopt Proper Organization Structure

Banks may required to adopt flatter organization structure for judicious blending of needs foe greater delegation of power, decentralization, customer centric business models, quickly reaction of customer needs, learn continuously from customers, provide customer access, whatever and however they want to transact and interact especially for catering younger IT survey population.

VII. CONCLUSION

The growth of information technologies in the world has been phenomenal. Thanks to these technologies, banks are being able to reach their customers anywhere at any time. Compared to banks abroad, Indian banks offering online services still have a long way to go. For online banking to reach a critical mass, there has to be sufficient number of users and the sufficient infrastructure in place. E-banking offers a higher level of convenience for managing one's finances even from one's bedroom. However, it continues to present challenges to the financial security and personal

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privacy. Many people have had their account details compromised, as a result of online banking. Thus, if one is going to use it for financial transactions, he should be aware of the risks involved. Awareness of the risks and problems enables him to take precautions for a more secured online banking experience. E-Banking system is not only popular nationally but also internationally where a person can transfer money through any part of the world. E-banking system is useful for the bankers as well as customers of banks.

REFERENCE

- 1. Chavan, j. (june 2013). Internet banking- benefits and challenges in an emerging economy. International journal of research in business,© impact journals.
- 2. Chawla, s. (2004). Internet banking in india: a glimpse of its adoption and implementation in indiathrough case studies. Iadis international conference. Www/internet 2004.
- 3. Dr. M.muninarayanappa, p. S. (january | 2014). A study on emerging challenges towards e- banking system in an indian economy. Researchjournali's journal of management.
- 4. Jamaluddin, n. (november, 2013). E-banking: challenges and opportunities in india. Proceedings of 23rd international business research conference. Melbourne, australia.
- 5. Padha, d. J. (2009). Internet banking systems in india: analysis of security issues. Proceedings of the 3rd national conference;. New delh: bharati vidyapeeth's institute of computer applications and management.
- 6. Pallab sikdar, m. M. (2013). Internet banking in india a perspective on benefits and challenges involved. International journal of engineering, business and enterprise applications (ijebea), 15-19.
- 7. Uppal, r. K. (mar 2011). E-banking: problems and prospects an empirical study in punjab. Information management and business review.
- 8. Investigating determinants of e-banking adoption by individuals: comparing the impact of system characteristics and user traits academic journal article by alhinai, yousuf salim; albadi, ali; alshihi, hafedh; al-gharbi, khamis international review of management and business research, vol. 2, no. 2, june 2013.
- 9. Furst, karen, william w. Lang, and daniel e. Nolle. "special studies on technology and banking." *office of the comptroller of the currency quarterly journal* 19, no. 2 (2000): 29–48.
- 10. Kalakota, ravi, and andrew b. Whinston. *Electronic commerce: a manager's guide*. Reading, ma: addison-wesley longman, 1997.
- 11. Wenninger, john. "the emerging role of banks in e-commerce." *federal reserve bank of new york current issues* 6, no. 3 (2000): 1–6.