

International Journal of Advance Research in Computer Science and Management Studies

Research Article / Survey Paper / Case Study

Available online at: www.ijarcsms.com

The Awareness towards E-banking and Cyber laws and Assess the Impact of Customer services and E-banking services in rural areas of India

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Abstract: *Growth of Information Technology has revolutionized business and has brought in substantial changes in the way business activities are being conducted. There is a paradigm shift in the way people use to access the markets. Today the term ‘Electronic Market’ is heard, learnt and experienced everywhere and almost by everybody. E-banking creates platform for faster and more efficient trade. The founding fathers of Internet hardly had any inclination that Internet could transform itself into an all pervading revolution which could be misused for criminal activities and which required regulation. Today, there are many disturbing things happening in cyberspace. Due to the anonymous nature of the Internet, it is possible to engage into a variety of criminal activities with impunity and people with intelligence, have been grossly misusing this aspect of the Internet to perpetuate criminal activities in cyberspace. Hence the need for Cyber laws in India. In order to continuing of E-Banking’s growth, the security and the privacy features need to be improved. The objective of this paper is to discuss the awareness towards E-banking and Cyber laws and assess the impact of customer services and E-banking services attributes on overall satisfaction of bank customers in rural areas like Kurnool of Andhra Pradesh in India. Also explained the various concepts expended while using E-banking services and determined the E-banking services from the customers view point for improved services.*

Keywords: *E-Banking, Cyberspace, Cyber laws, Customer Services, Electronic Market, Criminal Activates, Intelligence, Security and privacy.*

I. INTRODUCTION

Growth of Information Technology has revolutionized Business and has brought in substantial changes in the way business activities are being conducted. There is a paradigm shift in the way people use to access the markets. Today the term ‘Electronic Market’ is heard, learnt and experienced everywhere and almost by everybody. E-banking creates platform for faster and more efficient trade. The founding fathers of Internet hardly had any inclination that Internet could transform itself into an all pervading revolution which could be misused for criminal activities and which required regulation. Today, there are many disturbing things are happening in cyberspace. Due to the anonymous nature of the Internet, it is possible to engage into a variety of criminal activities with impunity and people with intelligence, have been grossly misusing this aspect of the Internet to perpetuate criminal activities in cyberspace. Hence the need for Cyber laws in India from the customers view point for improved services. To determine the current scenario of cyber-crimes in India the following are the objectives.

1. To analyze the categories of cyber-crimes in banking sector.
2. To review the tricks/ techniques used by cyber criminals.
3. To review the current scenario of cyber-crimes.

4. To provide set of instructions to be followed as a victim of cyber-crime.
5. To suggest the preventive measures and safety tips to control and prevention of cyber-crimes.

1.1. Cyber laws and assess the impact of customer services.

Cyber law is important because it touches almost all aspects of transactions and activities on and concerning the Internet, the World Wide Web and Cyberspace. Initially it may seem that a Cyber law is a very technical field and that it does not have any bearing to most activities in Cyberspace. But the actual truth is that nothing could be further than the truth. Whether realize it or not, every action and every reaction in Cyberspace has some legal and Cyber legal perspectives. Cyber law (also referred to as cyber law) is a term used to describe the legal issues related to use of communications technology, particularly "cyberspace", i.e. the Internet. It is less distinct field of law in the way that property or contracts are as it is an intersection of many legal fields, including intellectual property, privacy, freedom of expression, and jurisdiction. In essence, cyber law is an attempt to integrate the challenges presented by human activity on the Internet with legacy system of laws applicable to the physical world. Cyber Law was ushered in India with the notification of Information Technology Act on October 17, 2000, the day which is celebrated as "Digital Society Day". It is at this juncture a study on awareness levels towards "E-banking and Cyber Laws" has been conducted. E-banking is one of the gifts to human beings by computer technology. E-banking is a fast spreading service that allows customers to use computer to access account transactions from a remote location such as at home or at the workplace. Convenience to customers", "Customer's satisfaction" is the area which draws the attention of e-banking. Electronic Fund Transfer, Telephone Banking, Corporate Banking Terminal, Increasing networking and ATM, Telephone Banking, Internet-Banking and mobile- Banking are some of the E-banking products which would be conveniently satisfying customers. Nevertheless various security issues related E- Banking services in India [1]. The present paper deals with lapses facing by the Indian banks with respect to E-banking services. It also discussed the impact of security issues on customer level satisfaction and awareness towards E-banking in rural areas like Kurnool.

Financial assets exist in the form of digitized information. The security of this digitized information gains prominence due to its susceptibility to compromise in cyber space. Technological advancements have created new possibilities for criminal activities, in particular the criminal misuse of data and assets. Cyber-crimes can involve criminal activities such as theft, fraud, forgery, defamation, mischief, hacking, phishing, spoofing etc. The abuse of computers has led to a gamut of new age crimes that are addressed by the Cyber Laws. Indian banking has seen a dramatic change in last few decades with the evolution of E-banking. Banks are using E-banking as a means to reach their customers' demand of 'any-time, any-where'. This opens up newer legal concerns regarding data security and privacy issues. Cyber laws play an important role in this context. It provides legal recognition to electronic documents and a framework to support e-filing and e-commerce transactions. It also provides a legal framework to mitigate cyber frauds. The overall objective of this study is to provide banks a foresight and insight of technical and legal aspects to handle.

1.2. E-banking privacy features need to be improved.

India is still in the prompt stages of E Banking growth and development, competition and changes in technology and lifestyle in the last 10 years have changed the face of Banking. The changes that have taken place impose on banks tough standards of competition and compliance. The issue here is in the scheme of E-Banking. It is likely to bring a host opportunities as well as unprecedented risks to the fundamental nature of Banking in India. The concept of Scope of E Banking is still evolving several initiatives taken by Government of India as well as country's Central Bank, the Reserve Bank of India have facilitated the development of E-banking and challenges and opportunities in India[2]. But E-banking privacy features needs to be improved in fast growing rural areas like Kurnool, AP, and India.

1.3. Security Issues and awareness towards E-Banking.

Electronic banking is the wave of the future and is offering its customers with a wide range of services. It provides enormous benefits to consumers in terms of the ease and cost of transactions. But it also poses new challenges for country authorities in regulating and supervising the financial system and in designing and implementing macroeconomic policy. It is required to highlight the challenges of E-banking. Further efforts have been made to suggest policy implications to make E-banking more effective [3]. To add further convenience to the customers, many banking institutions are working together to form an integrated system such as the Integration Financial Network. In order to continuing of electronic banking's growth, the security and the privacy aspects need to be improved. With the security and privacy issues resolved, the future of electronic banking can be very prosperous.

1.4. E-Banking: Impact, Risk and Security concerns.

E-banking creates issues for banks and regulators alike. For their part, banks should follow:

- Have a clear and widely disseminated strategy that is driven from the top and takes into account the effects of E-banking, together with an effective process for measuring performance against it.
- Take into account the effect that e-provision will have upon their business risk exposures and manage these accordingly.
- Undertake market research, adopt systems with adequate capacity and scalability, undertake proportional advertising campaigns and ensure that they have adequate staff coverage and a suitable business continuity plan.
- Ensure they have adequate management information in a clear and comprehensible format.
- Take a strategic and proactive approach to information security, maintaining adequate staff expertise, building in best practice controls and testing and updating these as the market develops. Make active use of system based security management and monitoring tools.
- Ensure that crisis management processes are able to cope with Internet related incidents. 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. Other benefits are expanded product offerings and extended geographic reach. This means that banks can offer a wider range and newer services online to even more customers than possible before. The benefit which is driving most of the banks toward E-banking is the reduction of overall costs. With E-banking banks can reduce their overall costs in two ways: cost of processing transactions is minimized and the numbers of branches that are required to service an equivalent number of customers are reduced. With all these benefits banks can obtain success on the financial market. But E-banking is a difficult business and banks face a lot of challenges.

II. RELATED WORK

R. K. Uppal et al [4], in their study "Customer Perception of E-banking Services of Indian Banks" discussed the different e-channels such as ATMs, credit and debit cards, tele-banking, mobile banking, online banking and smart cards, which have changed the face of the Indian banks. The main objective of the study was to analyze the perceptions of the bank customers regarding E-banking services and to suggest some remedial measures to improve E-banking services. He found and concluded that the customers preferred e-channels with time and cost utility to provide efficient services. The customers are not fully aware of the operational part of each channel and their transactional facilities. On the basis of the observations of the respondents it can be stated that the future of E-banking services will be bright and that in the coming years, the e-channels will definitely help in the transformation of banking in a positive manner. On the basis of the findings the paper suggests that the

details regarding operating system and facilities provided by the e-channels should be highlighted to each age group and also to the customer irrespective of their occupations. This will create a better awareness among the customers regarding E-banking services.

GV Chalam and KS Nageshwara Rao et al [5], in their paper “E-banking Applications in Indian Bank- Emerging Issues” have pointed out that the security and privacy aspects continue to remain a major issue especially in the case of business people who lack awareness. This is one of the biggest road blocks for successful e-banking. To protect the interest of the customers, the government does not formulate the cyber laws and the legal frame work for E-banking on a full scale so far. The low density of telephone lines and low computerization of banking activities are other hurdles for E-banking in India. The breach of security in E-banking related applications such as internet banking could result in the siphoning off a large sum of money by perpetrators of computer crime. Therefore, the banks need to put in place computer security-related hardware and software such as firewalls, encryption programs and virus protection software. In the current scenario, legal issues arising out of siphoning off cash electronically by the computer criminals will pose a major challenge to Indian banks in the E-banking era.

B.Manoharan et al [6], in their study “E-Service as a Tool for Marketing of Financial Services” observes that there is an urgent need for firms to place a new emphasis on customer-relationships that combines selling with personal financial consultation to meet client’s specific needs. Thus, financial planning, portfolio allocation and advice tailored to each individual’s risk tolerance and Life stage will become the hall marks of the new full-service orientation, as firms are both pushed and pulled towards the brave new world of the retailing of brokerage. Despite all the challenges, e-broking industry seems like a sector set to grow day-by-day. For any organization to thrive in today’s dynamic business environment, it must learn to deal effectively with intense global completion, and cope with an increasingly rapid pace to change.

Jayant Kumar and Hitesh Bhatia et al [7], in their study “E-Banking- Some Economic Implications” found an important economic implication of E-banking that has made the measurement of money supply difficult, thereby making the central bank’s task of monetary policy formulation and implementation cumbersome. Precisely, money stock is no longer a well behaved intermediate/strategic variable which is amenable to targeting, so as to achieve desirable effects on output, employment and price stability. The influence of E-banking on the labor market is wide and penetrative.

Dr.A.Subbiah and Dr.Jeyakumar et al [8], in their article “E-banking – A New Dimension of Customer Service of Commercial Banks in India” has stated that the E-banking is becoming immensely popular globally and India is no exception to it. The declining interest rates, falling PC prices, broad bandwidth access through cable and digital subscriber lines accessing the NET through cable TV and the like would definitely encourage the boom in E-banking. It is reducing the transaction costs and is winning the trust of customers and proving to be an appropriate model for customer service of commercial banks in India. So the E-banking has a greater role in customer service of the commercial banks in India.

Kumar and Saini et al [9] studied the adoption of electronic banking technologies by Indian consumers. It has been observed in the findings that contextual and demographic variables influence the adoption of new technology in banking sector. Urban consumers are more confident than their rural counterparts in accepting the new technology. Further younger consumers reveal more openness to change and more familiar with the technology. Male consumers use technology more than the female and well educated consumers use technology more easily than those with lower educational status. Income has also been identified as an influence factor in the adoption of electronic technologies. Consumers from high income group use it more than the low income group.

III. METHODOLOGY

The advancement of E-banking technology creates the task easier, banking transactions exchanges very quickly within clicks. The Internet banking and mobile applications create daily banking fast and convenient. The misuse of information technology in the cyber space is holding active which provided confinement to cyber-crimes at the national and international

level. The proportion of jeopardies and the challenges related with it is increased. Nevertheless internet and mobile banking is certainly not 100 % safe. In this study we explored on cyber-crimes related to internet banking and the tricks and techniques associated by hackers. At this point expressed the E-banking services attributes on overall satisfaction of bank customers and explained the various concepts used while using E-banking services. It evaluated the E-banking services from the customers view point for improved services.

Different Cyber-Attacks:

Viruses and Worms: They are computer programs that affect the storage devices of a computer or network, which then extract the duplicate information without the knowledge of the E-Banking user.

Spam E-mails: These are unwanted emails or junk postings send to user's inbox without the consent of the receiver. The situation potentially creates a wide range of problems if these are not filtered correctly.

Trojan: A Trojan is a program that appears legitimate to user. But, once run, it moves on to locate password information or makes the system more vulnerable to future entry; or else it may simply destroy programs or data on the hard disk.

Phishing: Phishing attacks are designed to steal a person's login and password. For instance, the phisher can access the victim's bank accounts or assume control of their social network.

Carders: Stealing bank or credit card details is another major cyber-crime. Duplicate cards are then used to withdraw cash at ATMs or in shops.

In this study it is evaluated the survey of internet banking services from the customers view point in Kurnool, A.P and measured customer satisfaction. Considered 150 customers (100 from public sector, 35 from private and 15 from rural banks), it is surveyed all the way through standard questionnaire containing 20 variables. Factor analysis, correlation regression, t-test techniques were used for data analysis and determination. We have observed that, customers are establishing to be gratified with 'consistency' however unhappy with 'user-friendliness'. Dualistic dimensions of privacy & security and execution remained not extensively contributed towards overall satisfaction. High percentages of users have not computer literacy in rural areas; it indicated that internet banking is standard to be very essential for users in future direction of banking with the help of fast growing IoT (Internet of Things). Despite the fact some of the banks providing guidance to their users with secure usage of online banking/ATM facilities, however our findings shows that the Information Technology usage and cyber-crimes related to online banking are increased in India. As part of the study it is reviewed and analysed the current scenario of cyber-crimes on the annual statistical reports of National Crime Record Bureau (NCRB) [10] data for the year 2014-2015 and Cyber Crime complaints 2015 [11] are acknowledged that the IT usage and cybercrime related to E-banking in India are on the upswing. Majority of the cyber-crimes have been through by young people in the age group of 18 to 30 years and are male gender. So banking and financial services platform's law enforcement agencies need to be adequately equipped to overcome and prevent the cyber-crime. The situation is recommended to follow the safety tips to avoid the unnecessary financial damage in rural areas like Kurnool in India.

Safety Tips for Online Secure Transaction:

- Avoid online banking, shopping, entering credit card details if the internet is not appropriately secured. Customers should check the internet banking account frequently and ensure all listed transactional statements are valid up to the date.
- Be extremely cautious of E-mails asking for confidential information, they could be phishing E-mails from fraudsters. Do not click on link given. Never ever click on a link in a spam e-mail.
- Always delete spam E-mails immediately and must be empty the trash box to avoid clicking on the same link by mistake.

- Be aware of lotteries that charge a fee prior to delivery of the prize. Here should not respond to lottery messages or call on the numbers provided in the text messages.
- While using a credit card for making payments online, check that website is secured as per the banks standard authentication
- Do not provide photocopies of both sides of the credit card to anyone. It can be misused by the fraudsters for online purchases.
- Notify the bank or credit card issuer if user does not receive the monthly credit card statement on time. Immediately inform to the credit card issuer if a credit card is misplaced or lost.
- Do not share bank credentials in public or through phone SMS.

IV. CONCLUSION

The study on E-banking creates platform for faster and more efficient trade. The founding fathers of Internet hardly had any inclination that Internet could transform itself into an all pervading revolution which could be misused for criminal activities and which required regulation. Today, there are many disturbing things are happening in cyberspace. Due to the anonymous nature of the Internet, it is possible to engage into a variety of criminal activities with impunity and people with intelligence, have been grossly misusing this aspect of the Internet to perpetuate criminal activities in cyberspace. Hence the need for Cyber laws in India from the customers view point for improved services. It expressed that E-banking privacy features need to be improved and discussed on E-Banking Impact, Risk and Security concerns. It explained that banks should focus the customers Security Issues and awareness towards E-Banking. Also discussed on different cyber-attacks and proposed different Safety Tips for Online Secure Transaction. Following are recommended to strengthen the E-banking system in Kurnool to develop a comprehensive regulatory and legal framework for e-commerce and E-payment. It would be recommended to raise public awareness on the use of E-Banking, e-commerce, and e-Payment. Encourage the current efforts to develop and expand E-banking infrastructure.

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