

Vol 3 Issue 3 Sept 2013

Impact Factor : 1.2018 (GISI)

ISSN No :2231-5063

Monthly Multidisciplinary  
Research Journal

*Golden Research  
Thoughts*

Chief Editor  
Dr.Tukaram Narayan Shinde

Publisher  
Mrs.Laxmi Ashok Yakkaldevi

Associate Editor  
Dr.Rajani Dalvi

Honorary  
Mr.Ashok Yakkaldevi

**IMPACT FACTOR : 0.2105**

**Welcome to ISRJ**

**RNI MAHMUL/2011/38595**

**ISSN No.2230-7850**

Indian Streams Research Journal is a multidisciplinary research journal, published monthly in English, Hindi & Marathi Language. All research papers submitted to the journal will be double - blind peer reviewed referred by members of the editorial Board readers will include investigator in universities, research institutes government and industry with research interest in the general subjects.

### ***International Advisory Board***

Flávio de São Pedro Filho Federal University of Rondonia, Brazil	Mohammad Hailat Dept. of Mathematical Sciences, University of South Carolina Aiken, Aiken SC 29801	Hasan Baktir English Language and Literature Department, Kayseri
Kamani Perera Regional Centre For Strategic Studies, Sri Lanka	Abdullah Sabbagh Engineering Studies, Sydney	Ghayoor Abbas Chotana Department of Chemistry, Lahore University of Management Sciences [ PK ]
Janaki Sinnasamy Librarian, University of Malaya [ Malaysia ]	Catalina Neculai University of Coventry, UK	Anna Maria Constantinovici AL. I. Cuza University, Romania
Romona Mihaila Spiru Haret University, Romania	Ecaterina Patrascu Spiru Haret University, Bucharest	Horia Patrascu Spiru Haret University, Bucharest, Romania
Delia Serbescu Spiru Haret University, Bucharest, Romania	Loredana Bosca Spiru Haret University, Romania	Ilie Pintea, Spiru Haret University, Romania
Anurag Misra DBS College, Kanpur	Fabricio Moraes de Almeida Federal University of Rondonia, Brazil	Xiaohua Yang PhD, USA
Titus Pop	George - Calin SERITAN Postdoctoral Researcher	Nawab Ali Khan College of Business Administration

### ***Editorial Board***

Pratap Vyamktrao Naikwade ASP College Devrukh,Ratnagiri,MS India	Iresh Swami Ex - VC. Solapur University, Solapur	Rajendra Shendge Director, B.C.U.D. Solapur University, Solapur
R. R. Patil Head Geology Department Solapur University, Solapur	N.S. Dhaygude Ex. Prin. Dayanand College, Solapur	R. R. Yaliker Director Managment Institute, Solapur
Rama Bhosale Prin. and Jt. Director Higher Education, Panvel	Narendra Kadu Jt. Director Higher Education, Pune	Umesh Rajderkar Head Humanities & Social Science YCMOU, Nashik
Salve R. N. Department of Sociology, Shivaji University, Kolhapur	K. M. Bhandarkar Praful Patel College of Education, Gondia	S. R. Pandya Head Education Dept. Mumbai University, Mumbai
Govind P. Shinde Bharati Vidyapeeth School of Distance Education Center, Navi Mumbai	Sonal Singh Vikram University, Ujjain	Alka Darshan Shrivastava Shaskiya Snatkottar Mahavidyalaya, Dhar
Chakane Sanjay Dnyaneshwar Arts, Science & Commerce College, Indapur, Pune	G. P. Patankar S. D. M. Degree College, Honavar, Karnataka	Rahul Shriram Sudke Devi Ahilya Vishwavidyalaya, Indore
Awadhesh Kumar Shirotriya Secretary, Play India Play (Trust),Meerut	Maj. S. Bakhtiar Choudhary Director,Hyderabad AP India.	S.KANNAN Ph.D , Annamalai University,TN
	S.Parvathi Devi Ph.D.-University of Allahabad	Satish Kumar Kalhotra
	Sonal Singh	

**Address:-Ashok Yakkaldevi 258/34, Raviwar Peth, Solapur - 413 005 Maharashtra, India  
Cell : 9595 359 435, Ph No: 02172372010 Email: ayisrj@yahoo.in Website: www.isrj.net**



**GRT** **A CRITICAL ANALYSIS OF CURRENT USERS' ACCEPTANCE OF ON-LINE BANKING IN INDIA**



**Barbole A. N. , Kharade S. M. , Shaikh A. A And Anshul Verma**

Head , Department, Commerce and Management, Chh. Shivaji Night College of Arts & Commerce, Solapur  
Research Scholar, Chh. Shivaji Night College of Arts & Commerce, Solapur  
Arts & Commerce College, Madha  
Birla Institute of Management of Technology, Grater Noida.

**Abstract:** Today's world is one with increasing online access to services. One part of this which is growing rapidly is Internet Banking. There are numerous factors like competitive cost, customer service, in customers using online banking products and services. The challenge for national banks is to make sure the savings from Internet banking technology more than offset the costs and risks associated with conducting business in cyberspace.

The adoption of Internet banking has been increased dramatically during the last few years due to the following reasons On-Banking is a typical service combining a communication and a distribution channel. On-line banking applications have had a continuous evolution over the time, from their apparition in the context of innovation in the banking sector to the relative standardization and convergence of current state. Internet service providers are playing an increasingly important role in India's 's transition to a knowledge-based, networked economy. These service providers are connecting Indian n businesses, consumers and citizens to the global and increasingly digital economy and are helping to provide the means by which electronic banking can be carried out across the country and around the world.

The term "On-line banking" has become widespread; a force that is here to stay. On-line banking and the Internet are increasingly becoming one of the most important drivers of strategic change for business and national governments. The new millennium has many new challenges and opportunities hidden in the unknown treasure of time. In this situation banking and finance sector cannot keep itself away from the winds of changes. The new technology has helped the banking to have a mix of knowledge with service and value in addition to product. It has helped to create modern products.

The banks that are first to bring the right mix of new technology and modern services are sure to win in this competitive world. This paper represents the current scenario of on-line banking in India, how it is up surging and also highlights some suggestions of improving on-line banking in the two countries.

**Key words:** on-line banking; internet service providers;

**INTRODUCTION :**

Electronic banking (popularly known as on-line banking<sup>1</sup>) is an umbrella term for the process by which a customer may perform banking transactions electronically without visiting a brick-and-mortar institution. The following terms all refer to one form or another of on-line banking: personal computer (PC) banking, Internet banking, virtual banking, online banking, home banking, remote electronic banking, and phone banking. PC banking and Internet or online banking is the most frequently used designations.

The emergence and growth of on-line banking in the last decade<sup>2</sup> has been shaking and shaping the financial sector worldwide. On-line banking has become increasingly prevalent, employed by many financial institutions to reduce costs associated with having personnel serve customers physically, shorten processing periods, increase speed, improve the flexibility of business transactions and provide

better services overall (Shih and Fang, 2004). Also, with the rapid growth of other types of electronic, largely internet based services; there has been increased interest in on-line banking services. Both the academic and popular literature forecasted the rapid growth and significant impact of on-line banking on all types of markets (Nielsen, 2002). Today, financial service institutions that offer their services over the Internet are keen to accelerate the adoption process, knowing that the cost of delivering the service over the internet is much less than delivering the same over the counter.

**LITERATURE REVIEW**

Chang (2004) found that the adoption of on-line banking is influenced by age, gender, marital status and the degree of exposure to on-line banking as well as characteristics of the bank. Nyangosi et al. (2009) studied the evolution of on-line banking in Kenya by comparing it

with India. The overall results revealed that customers in both countries have developed positive attitudes and they attach much importance to the emergence of on-line banking. Singh and Malhotra (2004) found that most banks in India provide correspondence and balance enquiry whereas in Oman, most of the bank customers indicated that they used on-line banking facilities to make statement enquiries and to make utility payments (Al Sabobagh and Molla 2004). Rotchanakitumnui and Speece (2003) made a qualitative study in Thailand to look into the barriers to Internet banking adoption. They found that the users of Internet banking have more confidence in the reliability of the system, whereas non-users are much more service conscious, and do not trust financial transactions made via Internet channels. Al-Hajri (2008) examined various factors that might act to determine whether a given technology is likely to be adopted by the banking industry in developing country such as Oman by comparing it with a developed country such as Australia.

The result indicated that relative advantage, organizational performance, Customer organizational relationship and ease of use, can shed light on the reasons for adoption of Internet technology. Chung et al. (2002) in a survey on the state of internet banking in New Zealand confirmed the fact that security and complication of internet banking are some of the factors limiting the full acceptance of internet banking.

The survey of literature reveals that many researchers have examined factors affecting Internet banking adoption, trends in different countries but very few are from India. This study is sought to focus on the level of current user's acceptance of on-line banking in India in order to fill this empirical gap.

#### **OBJECTIVES OF THE STUDY**

This study has the following major objectives:

To analyze the on-line banking services offered by Indian banks

To investigate from Indian customers the different types of on-line banking technologies adopted by their banks.

To study on-line banking usage in India

To make necessary suggestions to improve the future of on-line banking

#### **RESEARCH METHODOLOGY**

The present study employs primary data. A well structured comprehensive questionnaire was used to collect the primary data. The questionnaires were prepared in two phases. In the first phase, unstructured in-depth interviews were conducted to create initial questionnaires. Further, expert opinions were collected and improvements were made to the survey instruments. In the second phase, a pilot survey was conducted with 20 on-line banking customers in Aurangabad, Latur and Nanded, to evaluate the understanding, alternative response options and determining whether some other response should be provided.

Finally after the necessary changes the research instrument was canvassed to the respondents in selected cities in India who were on-line banking users and had agree to participate in the survey. The cities selected for this study, are representatives of the general population when

considering the banking and personal characteristics. The research instruments were personally distributed using drop and pick method. E-mail attachment through internet was used to send the questionnaires to known customers. This step was taken mainly to avoid complains from the internet users and also to increase number of respondents.

In the survey instruments five point Likert's scales was used to measure the opinion of respondents from the statements ranging from 1=Strongly Disagree/Completely Irrelevant to 5= strongly Agree/ Completely Relevant. Objective type of options was given to examine the type of e-channels and services offered through on-line banking. The survey questions consist six specific sections and each of them contains questions to reflect different parts of the study. The time and cost constraints and difficulty to access to the potential respondents in both nations caused the researcher to use the convenience sampling method. In answering the questions, the respondents were assured about the confidentiality of their responses that their names were not published.

Out of the total 250 questionnaires distributed to respondents in India and after several reminders, 225 responses were received. Each of the responses received was screened properly for error, incomplete and/or missing responses. After having done the appropriate screening process, 35 returned questionnaires were considered as unusable and the rest 290 responses were used which were considered as complete and valid for final analysis.

This means that a response rate of 82.8% was achieved. The analysis of primary data was carefully done using some statistical techniques. Among others, cross-tabulation, mean score analysis, percentages, graphs and other appropriate tools were applied with the help of Statistical Package for the Social Sciences (SPSS) statistical software Version 12.0.

#### **SURVEY AND EMPIRICAL FINDINGS**

Demographic data of the respondents' age, gender, marital status, educational level and occupation, and bank characteristics like bank type and account type was collected through some questions of the survey.

#### **DESCRIPTIVE STATISTICS OF THE SAMPLE**

On the basis of educational level, customers with bachelors and masters degrees were mostly adopters of on-line banking. The trend affected both countries. From occupation point of view, students carried the lead in the country of the study (with 40.0% respondents), they were followed by service people (23.3% and 25.7% from India), business people (20.0% from India), professionals (10.0% and 14.3% from India) and other occupation had 6.7% from India and 4.3% from other countries.

From the bank-type dimension, majority (58.0%) of the respondents in India were customers of private banks, 32.7% and 9.3% belonged to public banks and MNBs respectively. The under developing and developing countries dimension shows that majority of the respondents (28.6%) were customers of public sector banks, 21.4% belonged to private banks and MNBs had only 11.4%. From type of account perspective, 68.0% of the Indian respondents had

savings accounts, 19.3% had current accounts and only 12.7 % had other accounts. In other countries like, Dubai, Kenya, 63.6% of the total sample had savings accounts, 11.4% had current account and 25.0% had other accounts.

H1: Education is not associated with on-line banking adoption

The above hypothesis is rejected since it was observed that majority of the respondents from both nations who had bachelors or masters degrees were mostly adaptors of on-line banking.

**On-line banking Technologies available in Indian Banks**

Respondents were asked to indicate the technologies their banks have adopted. Seven common technologies were selected to present the variables as shown in Table 2. The variables are labeled and the results are presented in Table 2 and Figure 1. Figure 1 reveals that majority of Indian n customers (96.0% and 92.9% respectively) are seen to favor ATM banking. This has been followed by Internet banking (89.3%)

**Distribution of On-line banking technologies available for Customers**

Variable	<20 yrs n=26	21-35 n=91	36-50 n=27	>50 yrs n=6	Total n= 150
Tele Banking	22 (84.6)	55 (60.4)	20 (74.1)	1 (16.7)	98 (65.3)
PC Banking	5 (19.2)	42 (46.1)	9 (33.3)	00	56 (37.3)
Debit Cards	7 (26.9)	88 (96.7)	19 (70.3)	2 (33.3)	116 (77.3)
Credit Cards	11 (42.3)	74 (81.3)	20 (74.1)	1 (16.7)	106 (70.7)
ATM Banking	24 (92.3)	90 (98.9)	25 (92.6)	5 (83.3)	144 (96.0)
Internet Banking	25 (96.1)	89 (97.8)	18 (66.7)	2 (33.3)	134 (89.3)
Mobile Banking	3 (11.5)	77 (84.6)	20 (74.1)	2 (33.3)	102 (68.0)

Note: Numbers in parentheses show percentages.

**H2: Age is associated with on-line banking adoption**

The hypothesis above is accepted since it was observed that young and middle aged customers were mostly adaptors of on-line banking in India

Variable	<20yr s n=26	21-35 n=91	36-50 n=27	>50yr s n=6	Total n= 150
Strongly Agree	21 (80.8)	72 (79.1)	18 (66.7)	3 (50.0)	114 (76.0)
Agree	3 (11.5)	13 (14.3)	2 (7.4)	1 (16.7)	19 (12.7)
Neural	2 (7.7)	3 (3.3)	00	00	5 (3.3)
Disagree	00	2 (2.2)	5 (18.5)	2 (33.3)	9 (6.0)
Strongly disagree	00	1 (1.1)	2 (7.4)	00	3 (2.0)

**On-line banking usage in India**

Respondents were asked to indicate the various on-line banking services they have adopted. The various services were listed as variables and the results are presented reveals that majority (77.0%) of the Indian respondent's favored Change PIN service. They use internet banking to change PIN regularly for security purposes.

**Perceived utility of on-line banking**

On-line banking has played a vital role in the process of transformation enabling banks to present various products and services to customers through cheap, convenient and easy channels. The research proposed to ask their feeling toward the acceptance of on-line banking. The result is presented on Table 3 on the basis of age-wise. The strong feeling were indicated by strongly agree and the weakest feeling was indicated by strongly disagree.

Age-wise analysis revealed that, 80.8% of the Indian respondents and 58.3% of the other countries respondents below 20 years of age, strongly agreed with the fact that on-line banking is a useful technology. 79.1% of age category two (21-35) from India, strongly agreed with the introduction of on-line banking whereas 60.7% of the other countries respondents in the same category strongly agree with the same statement. Also, 66.7% of the age category three (36-50 years) from India and 63.6% from Kenya strongly agreed with the introduction of on-line banking technology in their respective banks. Of the total respondents aged 50 years and above, 50.0% of the total sample from India indicated that they to have been using on-line banking services 81.8%.

**CONCLUSION AND SUGGESTIONS**

The banking industry has been a leader in the e-commerce world in recent years. Banks are nowadays trying to advance their ways of providing financial services to their customers. On-line banking in India is still at a budding state due constraints such as unavailability of backbone network connecting the whole country; inadequacy of reliable and secure information infrastructure especially telecommunication infrastructure; sluggish ICT penetration in banking sector; insufficient legal and regulatory support for adopting on-line banking and so on3. The study reveals that ATM banking and internet banking are the services which are mostly adopted by Indian customers. The results reveals further that majority of Indian customers, use on-line banking technology to change PIN regularly for security purposes while their counterparts in Kenya use this technology to check account balance. On the other hand, a significant number of respondents from both nations strongly agreed with the introduction of on-line banking in their banks. Respondents felt that banks not providing on-line banking services would lose customers to competitors who offer such services. Although still nascent, development and improvements are taking place thus changing the face of banking industries in both countries. In order to accelerate the adoption of on-line banking in India , banks in both countries should: Ensure they have adequate management information in a clear and comprehensible format; Review their business strategy and create the required space for

adopting on-line banking; Strengthen ICT department through providing training to IT personnel and procuring required hardware and software; Train all staff in basic ICT related matters in phases. Thus, providing on-line banking is increasingly becoming a “need to have” than a “nice to have” service.

#### REFERENCES

- I. Al Sabobagh, I. and Molla, A. (2004). “Adoption and use of Internet Banking in the Sultanate of Oman”, *Journal of Internet Banking and Commerce*, 9(2)
- II. Aladwani, A. M. (2001). “Online banking: A field study of drivers, development challenges, and expectations.” *International Journal of Information Management*, 21(3), 213-225
- III. Aladwani, A. M. and Palvia, P.C. (2002). Developing and validating an instrument for measuring user- perceived web quality *Information & Management* 39(6), 467-476
- IV. Al-Hajri, S. and Tatnall, A., (2008) “Technological Innovations and the Adoption of Internet Banking in Oman” *The electronic journal for virtual organizations and networks*, 10, August.
- V. Basel Committee., Basel report on banking supervision, 1998, [www.bis.org](http://www.bis.org).
- VI. Bhasin, M. (2007) 'Mitigating Cyber Threats to Banking Industry', *The Chartered Accountant*, 32(2), 618-624
- VII. Central Bank of Kenya (CBK), Bank supervision and annual report, 2007, [www.centralbank.co.ke](http://www.centralbank.co.ke)
- VIII. Chang, Y., Dynamics of Banking Technology Adoption: An application to Internet Banking, (2004), [www.uea.ac.uk/~j106/ib.pdf](http://www.uea.ac.uk/~j106/ib.pdf)
- IX. Chung, W. and Payter, J. (2002). An Evaluation of Internet Banking in New Zealand. Proceedings of the 35th Hawarii International Conference on System Sciences. IEEE Hawarii, September, 1-9
- X. Daniel, E. (1999). "Provision of Electronic Banking in the UK and the Republic of Ireland", *International Journal of Bank Marketing*, 17(2)
- XI. Net4 India Limited (2001) 'Anywhere money internet banking systems', White Paper 2310, Winter.
- XII. Nielsen, J. (2002). "Internet Technology and Customer Linking in Nordic Banking", *International Journal of Service Industry Management*, 13(5), 476-495
- XIII. Nitsure, R. (2003). 'On-line banking challenges and opportunities', *Economic and Political Weekly*, 27 December, 5377-5381
- XIV. Nyangosi, R., Arora, J. S. and Singh, S. (2009). "The evolution of on-line banking: a study of Indian n technology Awareness", *International Journal of Electronic Finance*, 3(2), 149-162
- XV. Radha, V. and Gulati, V. (2004). "Preventing technology based banks frauds", *Journal of Internet Banking and Commerce (JBC)*, 9(1), 132-145
- XVI. Rotchanakitumnuai, S., and Speece, M. (2003). "Barriers to Internet banking Adoption: A qualitative study among corporate customers in Thailand", *International Journal of Bank Marketing*, 21(6)(7), 312-323
- XVII. Shih, Y. and Fang, K. (2004). The Use of Decomposed Theory of Planned Behaviour to Study
- XVIII. Internet Banking in Taiwan, *Internet Research*, 14

(3), 213-223

XIX. Simpson, J. (2002). 'The impact of the internet in banking: Observations and evidence from developed and emerging markets', *Telematics and Informatics*, 19(4), 315-330.

XX. Singh, B. and Malhotra, P. (2004). "Adoption of Internet Banking: An Empirical Investigation of Indian Banking Sector", *Journal of Internet Banking and Commerce*, 9(2)

# Publish Research Article International Level Multidisciplinary Research Journal For All Subjects

Dear Sir/Mam,

We invite unpublished research paper.Summary of Research Project,Theses,Books and Books Review of publication,you will be pleased to know that our journals are

## Associated and Indexed,India

- \* International Scientific Journal Consortium    Scientific
- \* OPEN J-GATE

## Associated and Indexed,USA

- EBSCO
- Index Copernicus
- Publication Index
- Academic Journal Database
- Contemporary Research Index
- Academic Paper Databse
- Digital Journals Database
- Current Index to Scholarly Journals
- Elite Scientific Journal Archive
- Directory Of Academic Resources
- Scholar Journal Index
- Recent Science Index
- Scientific Resources Database

Golden Research Thoughts  
258/34 Raviwar Peth Solapur-413005,Maharashtra  
Contact-9595359435  
E-Mail-ayisrj@yahoo.in/ayisrj2011@gmail.com  
Website : www.isrj.net