

## E-Banking: A Pioneering Service Approach in Commercial Banks in India

Pooja

Research Scholar (SRF)  
Faculty of Commerce, Banaras  
Hindu University

### Abstract

Demand for financial services is changing rapidly and customer behaviour regarding these services is also adapting rapidly. Consequently, with the passing of the traditional banking to electronic banking, new strategies have become necessary in order to attract and retain existing as well new customers. E-banking is the most innovative trend among the customers. The transfer from the traditional banking to e-banking has been a rising amendment in banking dealings. Enlarged competition, the advancement of information & communication technology, and changing business environment etc. are the important concerns that have forced banking services to change. This particular paper tries to explore the role and relevance of e-banking in regard to customer services and as a cost reduction tool for banks in India and the initiative taken by RBI along with progress made by Scheduled Commercial Banks in this regard.

**Keywords:** ECS Credit, ECS Debit, National Electronic Funds Transfer (NEFT) System, Cheque Truncation Payment

### Introduction

Banks have usually been in the front position of exploiting technology to improve their products/services and working competence. Over a long period of time banks have been using electronic and telecommunication modes for delivering a wide range of value-added product/services. The transaction channels include private networks; public networks etc. and the devices include phone, computers, Automated Teller Machines (ATMs), etc. The wide use of computers, laptops, tablet, mobile phones etc. make easy access to internet and World Wide Web. This form of banking is generally referred to as Electronic Banking, although the range of products and services offered by different banks vary widely both in their content and sophistication. From the perspective of banking products and services being offered through internet, debit and credit cards, ATMs, mobiles, e-banking is nothing more than traditional banking services delivered through an electronic communication backbone.

### Objectives

The main objectives of the paper are to identify the role and relevance

e-banking in regard to customer services and as a cost reduction tool to banks in India; and to analyse the growth and progress made by scheduled commercial banks in regards to e-banking services.

### **Research Methodology**

Particularly, this study is descriptive in nature. Secondary data collected from various available resources like reports Reserve Bank of India, documents of Planning Commission of India, books, articles and web resources. Simple tabular analysis and relevant graphs are used for analysis purpose wherever found relevant for particular study.

### **Electronic Banking: A Conceptual Framework**

Business houses rely on efficient and quick access to banking information for cash flow checks, inspecting and day to day transaction processing. E-banking offers ease of access, secured transactions and 24-hour banking services. In information-driven business environment, companies who do not use e-banking are out of the race of achievement of competitive advantages. E- Banking is the latest invention in the series of technological surprises in the recent past. ATMs, tele-banking, internet banking, credit cards and debit cards have appeared as successful delivery channels for common banking products/services.

Through e-banking, bank customers can request the information and carry out most retail banking services such as balance reporting, inter-account money transfers, bill payment, etc., via telecommunication network without leaving their home or offices. It provides universal connections from any location worldwide and are universally accessible from any internet linked computer or other related devices. The information technology developments in the banking sector have speed up communication and transactions for the present as well potential clients. It is very important to enlarge this banking trait to clients for maximising the advantages for both clients and service providers as well.

### **E- Banking is a Convenient Banking Service to Customers for Banking Transactions**

This fast emerging economy which may be called the digital economy is bringing with it rapidly shifting technologies, rising knowledge strength in the areas of business and creating effective supply chains and new forms of businesses and service delivery channels such as e-banking. E-banking has been used in many different ways, partly because electronic banking refers to several types of services through which banks' customers can request information and carry out most banking services by means of the internet, television or mobiles. A more comprehensive definition for e-banking comes from the Basel Committee Report on banking supervision that is "E-banking is the

provision of retail and small value banking products and services through electronic channels, such products and services can include deposit taking, lending, account management, the provision of financial advice, electronic bill payment products and services such as electronic money."

Banking institutions have become an essential component of most economies whether they are described as "engines for economic growth" or as acting as "conduits towards promoting economic growth" stated by the Basel Committee. It eliminates the conventional physical barriers as it could arrive at customers of different countries. This has increased the enquiry of the influence of the supervisory system, to which such dealings should be subjected. It has added a new height to different kinds of risks usually associated with banking, heightening some of them and flings new risk control challenges. It is convenient, it is not bound by functioning timings, there are no geographical barriers and the services can be offered at a miniscule cost. Through e-banking, customers can check transactions at any time of the day and as many times as they want to. They get quarterly statements from the bank absolutely free.

### **E-banking is a Valuable Hi-tech means for increasing Functioning and Incomes of the Banks**

Now a day's banks have speedily affected through the potentials of the internet technologies and adopted the online banking. The majority of banks now offer a multitude of banking services and products to a continually increasing base of banking customers. It is worth to say that internet has changed the magnitude of competition in the banking industry. Next to the opening of computerised banking, ATMs, credit and debit cards, electronic cheques, SMS banking etc. which are the preliminary foundation of e-finance, the bigger acceptance and saturation of internet has created a new delivery channel in retail banking i.e. e-banking. Through a circular of Reserve Bank of India, the benefit of e-banking can be understood as, internet is emerging as a powerful channel for banks to receive instructions and deliver products and services to their customers. This form of banking is known as internet banking (Reserve Bank of India, 2001).

Banks can accumulate a large amount of working capital from not having to open slab and field branches in new locations and far distant areas. These savings can be gained in the form of reduced or cost-free charge for inter-bank and intra-bank money transfers, no fees are required for online payment of utilities' bills, and cash-back on frequent use of applied bank credit cards.

## Growth of E-banking Services by Scheduled Commercial Banks in India

### Initiatives taken by Reserve Bank of India

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:

- **Information through Electronic System:** Broad purpose information like interest rates, branch location, bank products, loan and deposit calculations are provided in the banks website. The communication is usually done through e-mail. There is no contact between the customer and bank's application system. No identification of the customer is made. In this system, there is no possibility of any unofficial person getting into production systems of the bank through internet.
- **Electronic Information Transfer System:** This system provides customer-specific information in the form of account balances, monetary transaction details, statement of accounts etc. Identification and authentication of the customer are done through a password. The information is

obtained from the bank's application system either in batch mode or off-line. The application systems cannot directly access through the internet.

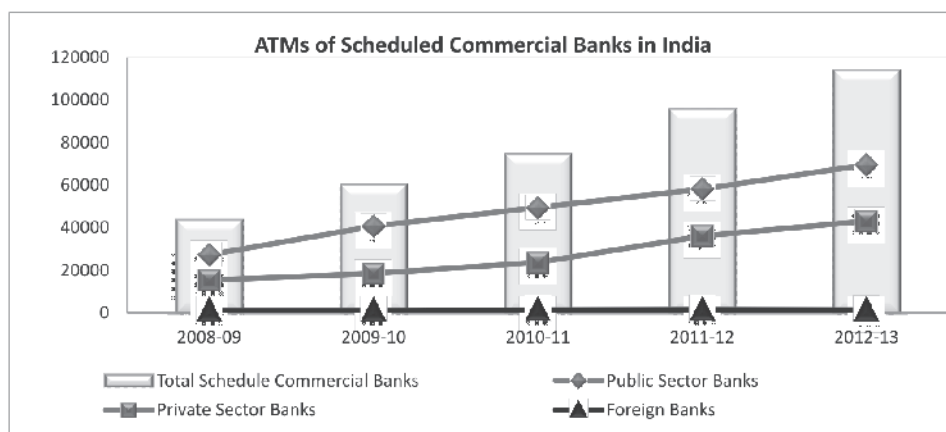
- **Fully Electronic Transactional System:** This system allows bi-directional potentials. Transactions can be accepted by the customer for online update. This method requires a high degree of security and control mechanism. In this situation, web server and application systems are linked over the secure infrastructure.

### Some statistics on the progress made in different e-banking services:

**Automated Teller Machines (ATMs):** - ATM is a modern machine initiated by the banks to facilitate the customers to have access to money regularly without visiting the bank personally. ATM has turned into the most popular and suitable delivery means throughout the country. Table 1 specifies the growth made by ATMs of Scheduled Commercial Banks in India for the period from 2008-09 to -2012-13.

Year	Public Sector Banks	Private Sector Banks	Foreign Banks	At the end of March	
				Total	Average
2008-09	27277	15320	1054	43651	14550.33
2009-10	40680	18447	1026	60153	20051.00
2010-11	49487	23651	1367	74505	24835.00
2011-12	58193	36079	1414	95686	31895.33
2012-13	69652	43101	1261	114014	38004.67
Total	245289.00	136598.00	6122.00	388009.00	129336.33
Average	49057.80	27319.60	1224.40	77601.80	25867.27

**Source:** Report on Trends and Progress of Banking in India, Reserve Bank of India, Mumbai, from 2008-09 to 2012-13



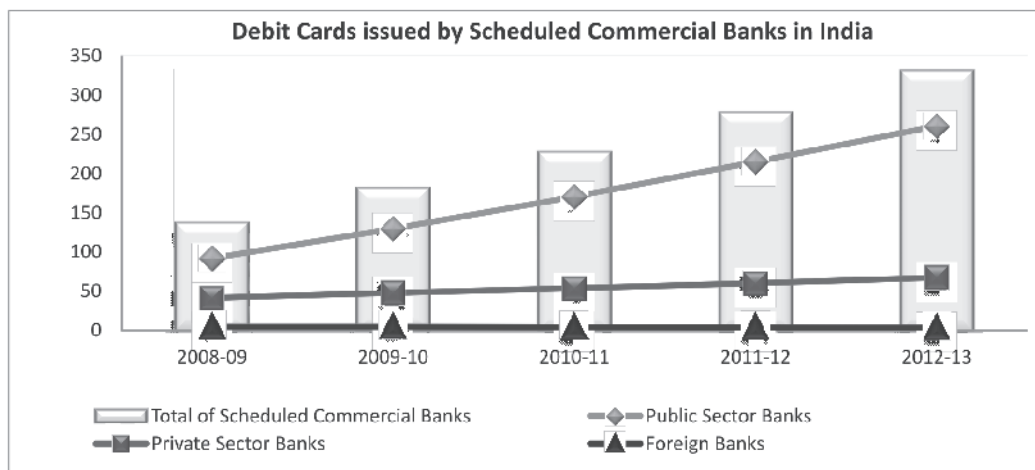
Graph 1: ATMs of Scheduled Commercial Banks in India

The table one indicates that the penetration of ATMs across the country rose during the year 2012-13 with the total number of ATMs amounting 1, 14,014, compared to 43,651 ATMs during 2008-09. It can be seen from graph 1 also. Taking bank wise growth of ATMs it has observed that public sector banks issued more ATMs compared to private and foreign banks.

**Debit Cards:** Debit cards permit anytime and any place accesses to the customers with their savings account or current account. Customers having a debit card need not to carry cash all the time with them. Table 2 and graph 2 illustrates bank group-wise outstanding number of debit cards issued by scheduled commercial banks in India at end March every year from 2008-09 to 2012-13.

Year	Public Sector Banks	Private Sector Banks	Foreign Banks	Total	Average
2008-09	91.70	41.34	4.39	137.43	45.81
2009-10	129.69	47.85	4.43	181.97	60.66
2010-11	170.34	53.58	3.92	227.84	75.95
2011-12	215.00	60.00	3.80	278.00	92.67
2012-13	260.60	67.30	3.30	331.20	110.40
<b>Total</b>	<b>867.33</b>	<b>270.07</b>	<b>19.84</b>	<b>1156.44</b>	<b>385.49</b>
<b>Average</b>	<b>173.47</b>	<b>54.01</b>	<b>3.97</b>	<b>231.29</b>	<b>77.10</b>

**Source:** Report on Trends and Progress of Banking in India, Reserve Bank of India, Mumbai, from 2008-09 to 2012-13



**Graph 2: Debit Cards Issued by Scheduled Commercial Banks in India**

In the year 2012-13, public sector banks have issued highest number of debit cards 260.60 million as compared to 67.30 million debit cards issued by private sector banks and 3.30 million debit cards issued by foreign banks operating in India. Taking into consideration, the total debit cards issued by scheduled commercial banks, it has found that 331.20 million cards issued during 2012-13 compared to 137.43 cards issued by scheduled commercial banks in the Indian economy during 2008-09.

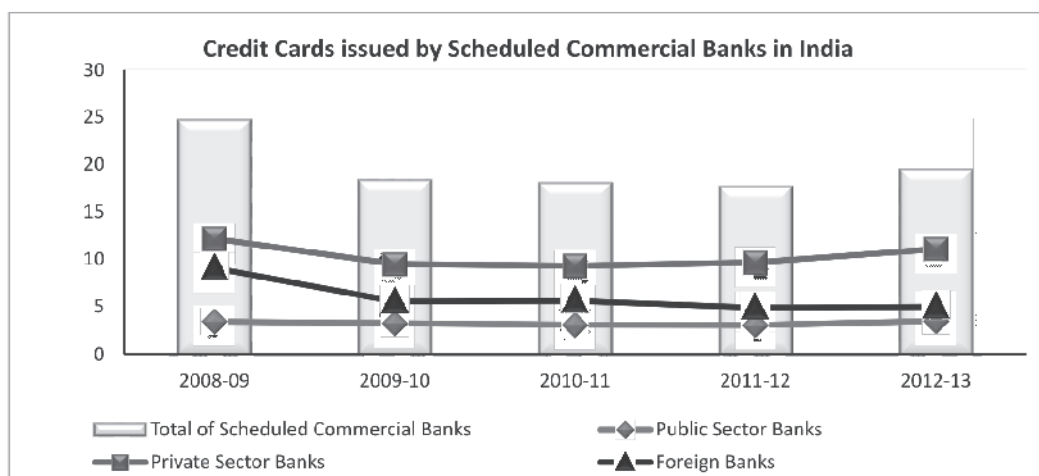
**Credit Cards:**

Credit cards also serve as a handy medium of exchange of money. It allows a customer to purchase products or services within a prescribed limit from certain authorised retail shop and service establishments without making immediate any cash payments. It is also called plastic money. Table 3 and graph 3 illustrates bank group-wise outstanding number of credit cards issued by scheduled commercial banks in India at end March every year from 2008-09 to 2012-13.

**Table 3: Credit Cards Issued by Scheduled Commercial Banks**  
(As at end-March) (In millions)

Year	Public Sector Banks	Private Sector Banks	Foreign Banks	Total	Average
2008-09	3.44	12.18	9.08	24.70	8.23
2009-10	3.26	9.5	5.57	18.33	6.11
2010-11	3.08	9.32	5.64	18.04	6.01
2011-12	3.06	9.67	4.92	17.65	5.88
2012-13	3.5	11.1	5.0	19.5	6.5
<b>Total</b>	16.34	51.77	30.21	98.22	32.73
<b>Average</b>	3.27	10.35	6.04	19.64	6.55

**Source:** Report on Trends and Progress of Banking in India, Reserve Bank of India, Mumbai, from 2008-09 to 2012-13



**Graph 3: Credit Cards Issued by Scheduled Commercial Banks in India**

From the analysis of table 3 it has found that, during the year 2012-13, private sector banks have issued highest number of credit cards 11.1 million as compared to 3.5 million credit cards issued by public sector banks and 5.0 million debit cards issued by foreign banks operating in India. But taking into consideration, the total credit cards issued by scheduled commercial banks, it has found that 19.5 million cards issued during 2012-13 compared to 24.70 cards issued by scheduled commercial banks in the Indian economy during 2008-09.

**Transactions through Retail Electronic Payment Systems:**

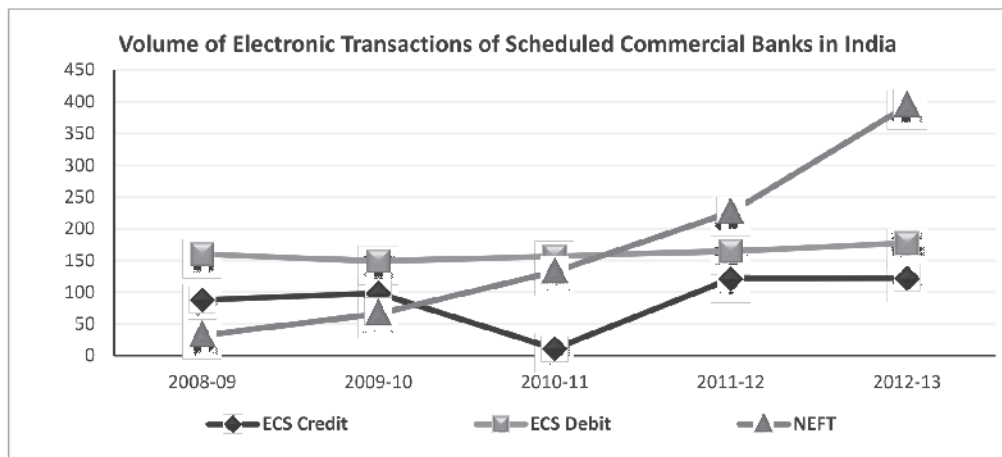
The electronic payment systems such as Electronic Clearing Service (ECS) credit and debit and National Electronic Fund

Transfer (NEFT) have improved the speed of monetary transactions across the country. Electronic Clearing Service (ECS) is one of the new electronic banking services. ECS is a non-paper-based movement of funds which is initiated by the Reserve Bank of India on a wide scale. ECS consists of Electronic Credit Clearing Service (ECS Credit) and Electronic Debit Clearing Service (ECS Debit). National Electronic Fund Transaction (NEFT) is a deferred net settlement system and is a development over other forms in terms of safety and processing competence. Table 4 shows the volume of electronic transactions of Scheduled Commercial Banks.

**Table 4: Volume of Electronic Transactions of Scheduled Commercial Banks**

(Volume in Millions)					
Year	ECS Credit	ECS Debit	NEFT	Total	Average
2008-09	88.3	160.00	32.10	293.70	73.43
2009-10	98.10	149.30	66.30	346.90	86.73
2010-11	11.30	156.70	132.30	349.60	87.40
2011-12	121.50	165.00	226.00	567.50	141.88
2012-13	122.20	177.00	394.00	717.20	179.30
<b>Total</b>	441.40	808.00	850.70	2274.90	568.74
<b>Average</b>	88.28	161.60	170.14	454.98	113.74

**Source:** Report on Trends and Progress of Banking in India, Reserve Bank of India, Mumbai, from 2008-09 to 2012-13

**Graph 4: Volume of Electronic Transactions of Scheduled Commercial Banks in India**

From the analysis of table 4 and graph 4, it can be said that the volume of ECS Debit (177.0) is greater than ECS Credit (122.20) during 2012-13. The volume of NEFT (394.0) is also greater than ECS Debit and ECS Credit during 2012-13. Comparing the transactions through retail electronic payment systems, it has seen that the total volume increased

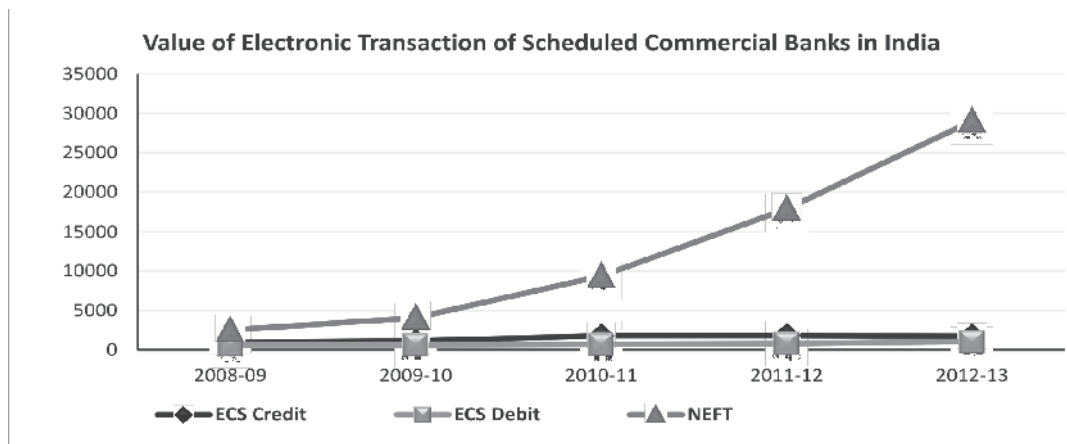
remarkably at 717.20 million during the year 2012-13 against 293.70 million at the end of March 31, 2009.

Table 5 shows the value of electronic transactions of scheduled commercial banks.

**Table 5: Value of Electronic Transactions of Scheduled Commercial Banks**

(Value in Rs. Billion)					
Year	ECS Credit	ECS Debit	NEFT	Total	Average
2008-09	974.87	669.76	2529.59	4174.22	1391.41
2009-10	1176.13	695.24	4095.07	5966.44	1988.81
2010-11	1816.86	736.46	9391.49	11944.81	3981.60
2011-12	1838.00	834.00	17904.00	20576.00	6858.67
2012-13	1771.00	1083.00	29022.00	31876.00	10625.33
<b>Total</b>	7576.86	4018.46	62942.15	74537.47	24845.82
<b>Average</b>	1515.37	803.69	12588.43	14907.49	4969.16

**Source:** Report on Trends and Progress of Banking in India, Reserve Bank of India, Mumbai, from 2008-09 to 2012-13



**Graph 5: Value of Electronic Transactions of Scheduled Commercial Banks in India**

From the analysis of table 4 and graph 5, it can be said that the value of ECS Debit (Rs. 1083.00 billion) is greater than ECS Credit (Rs. 1771.00 billion) during 2012-13. The value of NEFT (Rs. 29022.00 billion) is quite greater than ECS Debit and ECS Credit during the financial year 2012-13. Comparing the transactions through retail electronic payment systems, it has seen that the total value increased remarkably at Rs. 31876.00 billion during the year 2012-13 against Rs. 4174.22 billion at the end of March 31, 2009.

### Conclusion

E-banking has added a new height to different kinds of risks associated with banking. It facilitates security of banking dealings, the validity of an electronic contract, customers' privacy etc. and poses a strategic risk of loss of business to those banks who do not respond in time, to this new technology, being the efficient and cost effective delivery system. For commercial banks, e-banking is the use of electronic way to transfer funds directly from one account to another account, rather than through cheques or cash money. E-Banking services can increase bank income and profits by reducing bank costs. No doubt commercial banks operating in India are making genuine efforts for the implementation of superior technology and putting of e-delivery channels, but individuals are still unwilling to accept the system because of the risk linked with it. Customers are not ready to take any risk on using the new methods. That is why it is important to spread the information about e-banking and its benefits and uses in context to security and privacy of customers' personal bank data.

### References

Alex Adddae-Korankye (2014): The Impact of E-banking n Customer Service and Profitability of Banks in Ghana; *Global Journal of Commerce and Management Perspective*, Vol.3(1), January-

### February 2014.

Chavan Jayshree (2013): Internet Banking- Benefits and Challenges in an Emerging Economy; *International Journal of Research in Business Management*; Vol. 1, Issue 1, June 2013, pp.19-26.

Komal and Rani Vandna (2012): *Progress of Banking in India-Customers Perspective*; *Business Intelligence Journal*, January 2012, retrieved from <http://www.saycocorporativo.com>.

GuptaKamal K and Bansal Ipshita (2012): *Development of an Instrument to measure Internet Banking Service Quality in India*; *Journal of Arts, Science & Commerce*, Vol.- III, Issue 2(2), April 2012, retrieved from <http://www.researchersworld.com>

Gupta V, (2002). "Overview of E-banking", E-banking: A Global Perspective Bankers Growth and Extent of Electronic Banking Services in India; retrieved from <http://shodhganga.inflibnet.ac.in>

Lal Roshan and Saluja Rajani (2012): E- Banking- The Indian Scenario; *Asia Pacific Journal of Marketing & Management Review*, Vol.1 (4), December (2012), retrieved from

[www.indianresearchjournals.com](http://www.indianresearchjournals.com)

Majid Karimzadeh: Electronic Banking Challenges in India: An Empirical Investigation; retrieved from <http://journal-archieves19.webs.com>

Malhotra Pooja and Singh Balwinder: The Impact of Internet Banking on Bank Performance and Risk: The Indian Experience; *Eurasian Journal of Business and Economics*, Vol. 2 (4), 2009, retrieved from <http://www.ejbe.org>.

Meihami Bahram, Varmaghan Zeinab and Meihami Hussein: The Effect of Using Electronic Banking

- on Profitability of Bank; Interdisciplinary Journal of Contemporary Research in Business, Volume 4, No. 12, April 2013, viewed from [www.Journal-archieves31.webs.com/1299-1318.pdf](http://www.Journal-archieves31.webs.com/1299-1318.pdf)
- Patil, and Usha N. (April 2012): Internet Banking in India: risk analysis and Adoption in an Emerging Economy; Indian Streams Research Journal; April 2012, Vol. 2 Issue 3, p283.
- Ramya S, Rajam K, Usha Rani M and Sivasubramanian D: Customer Loyalty towards E-Banking Services; Journal of Business Management & Social Sciences Research; Volume 2, No.9, September 2013, retrieved from <http://borjournals.com>
- Report on Internet Banking: Reserve Bank of India; retrieved on June 30, 2014 from*  
<http://rbidocs.rbi.org.in/rdocs/PublicationReport>
- Role of E Banking system in the development of the financial system in India; retrieved from*  
<http://in.answers.yahoo.com>
- Sumra Sana Haider, Manzoor Mohammad Khurram, Sumra Hassan H. and Abbas Momina: The Impact of E-Banking on the Profitability of Banks: A Study of Pakistani Banks; Journal of Public Administration and Governance, Vol. 1, No. 1, 2011.
- Shukla Ruby, Shukla Pankaj: E-Banking: Problems and Prospects; International Journal of Management and Business Studies, Vol. 1, Issue 1, March 2011; pp. 23-24.
- Sadr, Seyed Mohammad Hossein: **Consideration the effect of E-Banking on Bank Profitability; Case Study Selected Asian Countries;** Journal of Economics and Sustainable Development, Vol.4, No.11, 2013, viewed from <http://www.iiste.org>, pp. 112-117.
- Sharma Himani: Bankers' Perspectives on E-Banking; NJRIM Vol.1, No.1, June 2011, retrieved from <http://www.publishingindia.com>
- Vyas Shilpan: Impact of E-Banking on Traditional Banking Services; retrieved from  
<http://arxiv.org/ftp/arxiv/papers/1209/1209.2368.pdf> viewed on August 5, 2014.