A STUDY OF THE IMPACT OF E-BANKING ON
THE BANKING INDUSTRY- with special reference
to Axis Bank

ABSTRACT

Financial institutions have been adopting internet banking since the mid 90s, predominantly due to lower operating costs associated with internet banking and the possibility of expanding clientele. In addition, customers utilizing internet banking facilities are increasing, as the cost savings on transactions over the internet are substantial. Internet banking enables speedy transactions, access, time and money savings through providing free paper, and complete and up-to-date transactions.

The impact on Statutory Support Systems, availability of Software and Hardware, infrastructure development, capital investments, customer perception, expectation and fulfillment, continued challenges in up gradation of technology to suit new banking products, availability of banking services at the desk-top and finger-tips, savings of time, commutation and minimal disruption of daily routine in attending to banking requirements for both Corporate and Individuals.

E-banking has also opened up new vistas of fraudulent transactions for the technologically savvy scamsters in cheating the customers as well as the banks of their monies. A gap in legal framework to tackle such crimes and the ever expanding banking products demanding continuous monitoring, review and implementation of statutes has been a challenge to law makers and law enforcers. A macro view of the scenario is also discussed.
The following methodology is being adopted to achieve the Primary and Secondary Objectives of the study.

a) Collecting of material and data on the internet;
b) Discussions with Banking Professionals;
c) Preparation of Questionnaire for Survey of Customer Satisfaction;
d) Collation of the above
e) Graphical Representation
f) Analysis
g) Findings
h) Recommendations

The study envisages exploring the situation and ascertaining the values in regard to overall perception of customer and the industry on the effect of e-banking, newer challenges of the future of e-banking, banking Industry’s readiness and the flexibility to adopt to up gradation of ever improving technology and the fast obsolescence of hardware and Software systems and the consequence of financial and capital outlay; and special attention being paid to recommend the risk mitigation in the e-banking domain to prevent both the customer and the banks losing out to frauds.

A questionnaire to ascertain the public perception of e-banking reveals that there is a high level of apprehension on the security aspect of the data revealed on the internet and a certain amount of uncomfortable feeling while interacting with banking services on the internet as personal interaction is coupled with enhanced satisfaction levels. While one section of the society, notably the middle aged and above segment seeks comfort with personal interaction and visits to the branch younger generation is more tuned to utilize the internet based services basically due to comparatively more awareness, adaptability and knowledge of technological processes.

A discussion with bankers also revealed that while data theft and phishing are being tackled on the go by huge capital investments in technology both in software and hardware banks also spend time, energy and monies in creating awareness of how, when and why they should reveal vital information on the world wide web. A little effort on both the customers and the banks would make it safer for both to use internet for banking purpose. Then e-banking would be a boon both to the industry and its users.

INTRODUCTION

1.1 Research Background

The world is changing at a staggering rate and technology is considered to be the key driver for these changes around us. An analysis of technology and its uses show that it has permeated in almost every aspect of our life. Many activities are handled electronically due to the acceptance of information technology at home as well as at workplace. Slowly but steadily, the Indian customer is moving towards the internet banking. The ATM and the Net transactions are becoming popular. But the customer is clear on one thing that he wants net-banking to be simple and the banking sector is matching its steps to the march of technology. E-banking or Online banking is
a generic term for the delivery of banking services and products through the electronic channels such as the telephone, the internet, the cell phone etc. The concept and scope of e-banking is still evolving. It facilitates an effective payment and accounting system thereby enhancing the speed of delivery of banking services considerably. Several initiatives have been taken by the Government of India as well as the RBI (Reserve Bank of India); have facilitated the development of e-banking in India. The government of India enacted the IT Act, 2000, which provides legal recognition to electronic transactions and other means of electronic commerce. The RBI has been preparing to upgrade itself as regulator and supervisor of the technologically dominated financial system. It issued guidelines on the risks and controls in computer and telecommunication systems to all banks, advising them to evaluate the risks inherent in the systems and put in place adequate control mechanisms to address

**E-Banking Concept**

**Features of e-banking**

1. **Transactional:**

2. **Non-transactional:** (e.g. online statements, Check links, Chat, Co-browsing)

3. **Automated Teller Machine (ATM):**

4. **Tele banking or Phone Banking:**

5. **Mobile Banking:**

6. **Internet Banking:**
TYPES OF INTERNET BANKING OR E-BANKING

a) Informational-

b) Communicative

c) Transactional

Need for the study

The situation offers an exciting and informative opportunity to study the impact of E-banking on the industry itself which has benefitted in a big way, and the challenges faced by the introduction of e-banking in the upgradation of technological inputs in the form of hardware and software, infrastructural support system through governmental agencies, re-orientation among the labour force and the management, repeal and amendments of statutes to accommodate the new era banking systems, customer reception, approach, apprehensions and grievance redressal mechanisms, shift in the work environment and business models and deliverables and finally and most tellingly the growth in overall results inclusive of Deposits, Advances and Profitability despite the huge capital investments that were demanded of the introduction and expansion of e-banking.

Objectives

1. Primary Objective

A STUDY OF THE IMPACT OF E-BANKING ON THE BANKING INDUSTRY - with special reference to Axis

Secondary Objectives

a) Customer perception, expectation and fulfillment
b) Awareness of Risks associated with E-Banking
c) Concerns with E-Banking for all stake-holders
d) Impact on savings of time, commutation and minimal disruption of daily routine in attending to banking requirements for both Corporate and Individuals
e) To study the nature of challenges and how they are addressed to the satisfaction of the internet banking users.
f) To study the extent to which there is awareness of Risks associated with E-Banking, amongst the users
Scope of Study

The scope of the study is to ascertain and explore the impact of the e-banking facility on the industry in terms of customers' perceptions, anxiety, awareness, risk mitigation, compensation against scams and the efforts by the various stake holders who need to come together to ensure the continued success of the e-banking system while reducing the risk for all.

LITERATURE

Review of literature

1. Carse, 1999

Customers want to transact their banking transactions at any time and location convenient for their life-style. They want to pay their regular household bills, buy and sell stocks and shares. The efficiency, growth and the need to satisfy a growing tech-survey consumer base are three clear rationales for implementing E-banking in Nigeria. The four forces - customers, technology, convergence and globalisation have the most important effect.

2. Balachandher, 2001

The specific things that delight the customer vary from industry to industry and from product to product. But most customers want the same things. According to

1.) Customers are interested in quality
2.) They desire good and effective service delivery
3.) They want flexibility so that the specific product or service be obtained
4.) They covet value by not wanting to pay a price that exceeds the value received from the product.

3. Dr. Himani Sharm, 2014

Today, e-banking is used as a strategic tool by the global banking sector to attract and retain customers. The survey data used in this research are collected through a questionnaire in Northern region of India by administering to 192 bankers. The enquiry reveals that customers generally use e-Banking services on persuasion of bankers. User-ship is mostly concentrated on professionals, business class and males belonging to middle age. The bankers are convinced that e-banking helps in improving the relationship between bankers and customers and that it will bring patent improvement in the overall performance of banks. So far as promotional avenues are concerned, print media is at the top

RESEARCH GAP

Given the wide range of contributing theories and factors identified in the literature, it is felt that existing theory on consumer adoption of internet banking was insufficiently mature for there to exist a solid foundational basis from which to explore our topic in a wider perspective with a special focus on consumer preferences and awareness through a questionnaire to elicit information and analyse the same.
METHODOLOGY

Target Respondents

Banking customers belong to all age groups, different segments of the society, genders, individuals and corporate houses. The customer base is purely that of Axis Bank’s but all segments of banking namely Salary A/c, Prime, Priority, Wealth and Privee.

Assumptions, Constraints and Limitation

Sampling Method

The primary data arrived at out of the Questionnaires are collated by using Frequency Distribution Method to arrive at the numbers and then these numbers are either taken as such or converted to percentages depending upon the nature of the question and are graphically represented.

Tools for Analysis

a) Graphs

Diagrammatic Representations

Graphs and Percentage Analysis

Q1) You have been using Axis Bank e-banking services for

<table>
<thead>
<tr>
<th></th>
<th>2 to 3 Years</th>
<th>1 to 2 years</th>
<th>Less than a year</th>
<th>Never used</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>28</td>
<td>28</td>
<td>25</td>
<td>19</td>
</tr>
</tbody>
</table>
Inference: It is evident from the graph that 28% each of people have been using the e-banking services for 2 to 3 years and 1 to 2 years and 25% of customers have been using it only for less than a year whereas, 19% of the people have still not begun using the services.

Q2) How often do you use e-banking services provided by the bank, in a week?

<table>
<thead>
<tr>
<th></th>
<th>Once in a week</th>
<th>More than once</th>
<th>Almost everyday</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>42</td>
<td>25</td>
<td>33</td>
</tr>
</tbody>
</table>

Table: 4.1.2
Inference: Almost 40% of people use e-banking services once in a week and another 40% use it more than once in a week whereas 20% of the customers have been using it almost every day.

Chi-Square Test

1. TEST OF DEPENDENCE BETWEEN GENDER AND USAGE OF TELEPHONE BANKING

Null Hypothesis $H_0$: Gender and usage of telephone banking are dependent

Alternative Hypothesis $H_1$: Gender and usage of telephone banking are not dependent

OBSERVED FREQUENCY TABLE

<table>
<thead>
<tr>
<th>Gender</th>
<th>Usage of Telephone Banking</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
</tr>
<tr>
<td>Male</td>
<td>2</td>
</tr>
<tr>
<td>Female</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
</tr>
</tbody>
</table>

Observed frequency in opinions of the various genders.

EXPECTED FREQUENCY TABLE

<table>
<thead>
<tr>
<th>Gender</th>
<th>Usage of Telephone Banking</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Never</td>
</tr>
<tr>
<td>Male</td>
<td>3.6</td>
</tr>
<tr>
<td>Female</td>
<td>2.4</td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
</tr>
</tbody>
</table>

Expected frequency in opinions of the various genders.

RESULT: At 5% Level of significance,

Degree of Freedom $= (R - 1) (C - 1)$

$= (2 - 1) (5 - 1)$

$= 4$

Tabulated Value at 4df $= \psi^2_{0.05} = 9.49$

Calculated Value $= \psi^2 = 4.840856$

$\Rightarrow \psi^2 < \psi^2_{0.05}$
INFERENCES:

Since the Calculated value of \( \psi^2 = 4.840856 \) is less than the tabulated value of \( \psi^2_{0.05} = 9.49 \); (Ho) is accepted. (i.e.) the attributes gender and usage of telephone banking are dependent.

2.) TEST OF DEPENDENCE BETWEEN WORK EXPERIENCE AND BEING A RISK TAKER

**Null Hypothesis** \( H_0 \) : People with more work experience tend to be a risk taker

**Alternative Hypothesis** \( H_1 \) : People with more work experience do not tend to be a risk taker

<table>
<thead>
<tr>
<th>EXPERIENCE</th>
<th>STRONGLY AGREE</th>
<th>AGREE</th>
<th>NEUTRAL</th>
<th>DISAGREE</th>
<th>STRONGLY DISAGREE</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1 yr</td>
<td>3</td>
<td>1</td>
<td>17</td>
<td>2</td>
<td>5</td>
<td>28</td>
</tr>
<tr>
<td>1-5 yrs</td>
<td>5</td>
<td>6</td>
<td>10</td>
<td>2</td>
<td>1</td>
<td>24</td>
</tr>
<tr>
<td>6-9 yrs</td>
<td>5</td>
<td>6</td>
<td>11</td>
<td>1</td>
<td>1</td>
<td>24</td>
</tr>
<tr>
<td>10-19 yrs</td>
<td>6</td>
<td>8</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td>&gt;20 yrs</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>20</strong></td>
<td><strong>24</strong></td>
<td><strong>40</strong></td>
<td><strong>8</strong></td>
<td><strong>8</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Table 4.2.2.1 Observed frequency in opinions of various experiences

<table>
<thead>
<tr>
<th>EXPERIENCE</th>
<th>STRONGLY AGREE</th>
<th>AGREED</th>
<th>NEUTRAL</th>
<th>DISAGREE</th>
<th>STRONGLY DISAGREE</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1 yr</td>
<td>5.60</td>
<td>6.72</td>
<td>11.20</td>
<td>2.24</td>
<td>2.24</td>
<td>28</td>
</tr>
<tr>
<td>1-5 yrs</td>
<td>4.80</td>
<td>5.76</td>
<td>9.60</td>
<td>1.92</td>
<td>1.92</td>
<td>24</td>
</tr>
<tr>
<td>6-9 yrs</td>
<td>4.80</td>
<td>5.76</td>
<td>9.60</td>
<td>1.92</td>
<td>1.92</td>
<td>24</td>
</tr>
<tr>
<td>10-19 yrs</td>
<td>4.00</td>
<td>4.80</td>
<td>8.00</td>
<td>1.60</td>
<td>1.60</td>
<td>20</td>
</tr>
<tr>
<td>&gt;20 yrs</td>
<td>0.80</td>
<td>0.96</td>
<td>1.60</td>
<td>0.32</td>
<td>0.32</td>
<td>4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>20</strong></td>
<td><strong>24</strong></td>
<td><strong>40</strong></td>
<td><strong>8</strong></td>
<td><strong>8</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Expected frequency in opinions of various experience

**RESULTS**: At 5% Level of significance,

\[
\text{Degree of Freedom} = (R - 1)(C - 1) = (5 - 1)(5 - 1) = 16
\]

\[
\text{Tabulated Value at 4df} = \psi^2_{0.05} = 26.29623
\]

\[
\text{Calculated Value} = \psi^2 = 29.7974
\]

\[
\Rightarrow \psi^2 > \psi^2_{0.05}
\]
INFEERENCE:

Since the Calculated value of $\psi^2 = 29.7974$ is greater than the tabulated value of $\psi^2_{0.05} = 26.29623$; (Ho) is rejected and H$_1$ is accepted (i.e.) People with more work experience do not tend to be a risk taker.

CONCLUSIONS

SUMMARY OF FINDINGS.

E-banking has created ripples and a revolution in the banking industry literally taking banking to the table tops and finger tips. A click is all one needs to hear to put through transactions of every nature be it deposits, withdrawals, transfers from one account to another from one bank to another, payment of bills etc., so much so that it has impacted very positively in increasing the banking business manifold apart from expanding the horizons of the banking domain.

The study has been very educative, informative and instructive.

a) The awareness of the usage of e-banking is limited;

b) The eagerness to use e-banking is clouded by fear and apprehensions of safety of the funds;

c) E-banking is found to be infested with high levels of possibility of data theft with either virus, phishing programs or deceptive web sites;

d) The banks’ commitment to reimburse the loss of monies to clients is not encouraging or assuring;

e) Insurance aspects of adequate cover on loss during e-banking process is woefully inadequate;

f) E-commerce is growing rapidly and is one of the motivations for e-banking;

g) Yet parting of vital card or payment or individual information on web sites is dependent of the brand-value and perception of safety by the users;

h) Irrespective of the mode of e-banking, worldwide web, telephone, ATMs etc., a fear of loss of security always lingers;

i) Employed people use more the e-banking;

j) Unemployed people use the branch banking frequently and less of e-banking

k) Less than 50% of the e-banking users call themselves risk-takers with less fear of losing monies through data-theft or not unduly worried about it.
5.2 **SUGGESTIONS AND RECOMMENDATIONS**

a) Awareness of how to use the facility of e-banking should be created by the banking industry using various modes of advertisement and the very same world wide web;

b) The availability of insurance against various types of e-banking frauds should be put in place which will help increase the usage of e-banking;

c) Increase in the volume of e-banking with help banks to reduce the cost of e-banking operations;

d) Banks should take steps to augment security measures to prevent data theft or phishing possibilities on e-banking sites and also deploy appropriate software to trace such fictitious transactions;

e) Registration of domain names with those of leading bank names should be subjected to a thorough scrutiny before it is permitted;

f) The e-banking public should make it a habit to change the passwords as frequently and periodically as possible to avoid chances of frauds in their banking accounts;

**REFERENCES**

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4) [http://www.tutor2u.net/](http://www.tutor2u.net/)

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   Author: Troy J. Strader, Management information systems, Iowa state university and Richard B Carter, Dept of finance, Iowa state university

2) E-Banking and Emerging Multidisciplinary Processes: Social, Economic and Organizational Models

   Authors: Mohammed Ali Sarlak & Asghar Abolhassani Hasitani
Journals

1) The Internet and the Need for Governance: Learning from the Past, Coping with the Future
   Authors: Dr. Prabir K. Neogi, Special Advisor, Electronic Commerce Branch, Spectrum, Information Technologies and Telecommunications Sector, Department of Industry, Government of Canada, Arthur J Cordell: Carleton University

2) Ecommerce: Ongoing Challenges
   Author: Derek Mohammed, PhD, Assistant Professor, Our Lady of the Lake University, San Antonio, Texas.