“E-BANKING IMPLEMENTATION IN INDIAN BANKS, A STUDY OF BANKS IN MAHARASHTRA STATE”

ABSTRACT

SUBMITTED TO
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Abstract

Electronic banking is an umbrella term for the process by which a customer may perform banking transactions electronically without visiting a brick-and-mortar institution. Each of the following terms refers to one form or another of electronic 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. This is one of the management tools of e-business. It provides efficiency for banks and businesses and convenience for individual customers. All banking functions can be carried out via the Internet: checking the status of accounts, transferal of funds between accounts, carrying out financial transactions, even using the account for online purchases. With the help of e-banking, one can overcome the drawbacks of manual systems, as computers are capable of storing, analyzing, consolidating, searching and presenting the data as per the user’s requirements with great speed and accuracy. A large increase in volume of work in banks can be handled by the computerization. Thus, the automation of existing banking system can eliminate the voluminous paper work and improve operational efficiency. Almost everything that can be attended via traditional method can be transacted electronically for which different techniques are available at present for conducting e-banking.

E-banking is widely used in many places across the world. The Indian Banking system has been operating successfully over the last two centuries. Several major banks in India are either offering e-banking services or planning to do so in the near future. The SBI, SBH and Bank of Maharashtra etc. are the prominent nationalized banks stepping into the competition of electronic banking services. Thus, today, all the nationalized banks and private commercial banks are providing 24*7 banking (e-banking) services to their customers. The networks of these banks are connected all over the India and outside.

The present study is based on the analysis of the e-banking in Indian banks and the Universe of the present study is restricted to Maharashtra state. This research work is divided into ten chapters consisting of:
i) The first chapter discusses about the history of banking, banking in India, meaning & definitions of bank and banking, banking groups in India, functions, banking regulations and banking development in modern era etc. In the same chapter an attempt is made to review the available literature on the topic of E-banking. Further, the research methodology, techniques, sample, objectives and data collection methods are presented.

ii) The second chapter is based on Banking Innovations or Evolution of E-banking. The researcher has studied the evolutionary phases of e-banking and also presented the impact of e-banking globally and in Indian scenario.


iv) In the fourth chapter technical architecture of e-banking is highlighted. Here, the researcher has studied the uses of computer networking, network hardware technology, Internet application, network software or protocol, e-banking architecture and e-banking transaction mechanism. In the same chapter the issues of attacks on e-banking, security requirement in e-banking, authentication techniques in e-banking and integration with existing core-banking are also discussed.

v) The fifth chapter has provided a comprehensive coverage of the computer information system of banks. Hence, an overview of information system, Banking software and hardware requirements, system development life cycle, MIS for bank, architecture of bank branch computerization, core banking system are the main aspects of the study.

vi) In the sixth chapter the researcher has studied various e-banking services available in present banking system. For example, ATM, credit/debit cards, EFT, ECS, RTGS, SPNS, EDI, mobile banking, tele banking and Internet/online banking etc.

vii) The seventh chapter deals with the electronic banking crimes and their prevention. Tools of cyber crimes, e-banking crimes, and money laundering through internet, e-banking regulation and prevention are the major sub topics in
this chapter. The researcher also studied use of cryptography techniques in e-banking.

viii) Chapter eight is devoted to study the e-banking products and services of different banks situated in Maharashtra i.e. ATM, cards services, fund transfer, internet/online banking, mobile and telephone banking etc. The researcher has conducted the study of ten different banks from private and nationalized public commercial banks, which are as follows:

<table>
<thead>
<tr>
<th>1. ICICI BANK</th>
<th>6. STATE BANK OF INDIA</th>
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<td>2. HDFC BANK</td>
<td>7. STATE BANK OF HYDERABAD</td>
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<td>3. YES BANK</td>
<td>8. BANK OF MAHARASHTRA</td>
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<td>4. DCB BANK</td>
<td>9. BANK OF BARODA</td>
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<td>5. AXIS BANK</td>
<td>10. IDBI</td>
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ix) Analysis and Interpretations:

This study is based on the survey and the data which is collected through the issue of questionnaire to the bank’s customers. Personal interaction and discussion with the customer have helped to understand their perception and attitudes about E-banking products and services. 22% of the banks are selected from both public and private sector for the study purpose. These banks are: ICICI Bank, HDFC bank, YES bank, IDBI, Bank of Maharashtra, DCB, Axis bank, SBI, SBH and Bank of Baroda. The Area of study is Maharashtra state, but the survey was also conducted in the Capital Delhi and in various cities of Uttar Pradesh so as to make the data more effective. The Sample respondents were selected on the basis of “Convenient Random Sampling Technique”. For understanding the perception and attitude of Bank’s customers towards e-banking, there are 27 questions related to various aspects of e-banking.

After completion of data collection task, the data were organized, tabulated and analyzed. The tables and graphs were prepared and interpretation was carried out. For the purpose of analysis of data, computer software is used and various statistical tools are applied like percentage analysis, cross section analysis, Chi-Square test etc.
a) Analysis:
For the purpose of analysis, the findings of the survey are classified into three groups:-
i) Findings on the basis of general parameters, ii) Cross section Analysis. and iii) Application of statistic tool i.e. chi-square test.

i) General Parameter Analysis:
The first part of the questionnaire consists of the following parameters:

1. Occupation
2. Gender
3. Marital Status
4. Age
5. Qualification
6. Annual Income
7. Accounts types wise analysis
8. Analysis on the basis of age of accounts

Occupation-wise analysis:
Of the total respondents, it is found that approximately 45% are from service category. Business category occupies only 15%. Professionals are 7% of the total and students are 30% of the total. Housewife category forms the negligible part of the total.

From the above it is observed that business class, which is expected to use the e-banking services to a large extent, is not doing so. Moreover, more and more number of housewives should be encouraged to the use the e-banking services. This may help in diverting the idle cash to the productive uses.

Gender-wise analysis:
On the basis of gender category, it is found that the male respondents are 72% and very few respondents are from female category i.e. 27%.

From the above it can be analysed that existence of a large number of male respondents is as per the expectations, because female respondents are also include the housewives who are more interested in investing in non-productive investments.
Marital Status wise analysis:
It is revealed that there are 53% of single respondents and 47% of respondents are married.

From the above it is analysed that both married and single respondents are approximately similar banking sense.

Age-wise Analysis:
Of the total respondents, age group 18-20 are 15.9%, 21-30 group 51.5%, 31-40 group 19.7%, 41-50 group 9.9%, 51-60 group 2.3% and 61 & above there are only 0.7% respondents.

The age group 21-30 and 31-40 contains service people, businessman and professionals. Therefore it is expected that maximum number of respondents are in these group. As the age group 18-20 consists of a maximum number of students, who are not having their savings. But in the age group 41-50 and 51-60 which also occupies service, business and professionals, the banking habits are at the decline. In the 61 & above very few respondents are because of there old age and unable to perform the banking transactions.

Qualification wise analysis:
As an analysis it is found that HSC qualified respondents are 16.1%, Graduates are approximately 46% and post Graduates are Approximated 38%. Qualification wise analysis of the data reveals that graduate & postgraduates constitute an approximately 84% of the total. Other categories account for just 16% of total. This indicates the lack of interest and awareness on the part of less educated and uneducated masses towards the usage of banking services.

Income wise analysis:
Of the total respondents, it is found that 1,00,000 and above income are 48.5%, Below 1,00,00 income respondents are approximately 18.4% and no earning respondents (i.e. students & house wives) are approximately 33.1%.

From the above study reveals that only the persons having more than one lakh rupees annual income are using the banking services. The people with the lower income perhaps have no savings. Hence they don’t need any banking services.
**Accounts types wise analysis:**

On the basis of account type analysis, it is found that the saving respondents are 90.2%, current account holders are 8.9% and very few respondents are from recurring and term deposit i.e. 0.2%.

From the above it can be analysed that saving account holders are more as compared to current account holders.

**Analysis on the basis of age of accounts:**

Of the total respondents, 1yr to 4 yrs old customer of the bank is 70.6%, 5yrs to 10 yrs are 23.6%, 11 yrs to 15 yrs are 4.3%, 16 yrs to 20 yrs & 21 yrs and above are very few i.e. 0.8% only.

From the above it can be analysed that recent account holders i.e. 1yr to 4 yrs old more preferred to use electronic banking as compared to others.

**ii) Cross Section Analysis:**

**b) Findings:**

As an analysis it is reveals that all the respondents have acknowledged their awareness of the e-banking concepts (i.e.100%). But the response to the query whether their banks are providing it, we observed that 95.9% respondents have given positive response and 4.1% have given the negative response. Almost 92.1% of the respondents agree that the electronic services are more convenient and suitable in present life. On the other hand 7.9% respondents disagreed. It is also observed that 52% of respondents do agree to the fact that Indian customer feels shy, hesitative and keep away from using electronic banking transactions and 48% of the respondents disagreed with this statement and they think that Indian people are much comfortable in accessing the e-banking. It is also found that 95.5% respondent’s banks are providing ATM cum Debit card services, in which 87.4% respondents accessing these services. But 4.5% respondents are disagreed that their bank provides this service. It is also found that 12.6% respondents are not using ATM cum Debit card services. It is revealed that 90.7% of the respondents think that using an ATM is easier, authenticated and safe for conducting banking transaction and 9.3% of the respondents deny this statement. It is also found that 73.2% of the respondents are satisfied with the banking charges of ATM services
and 26.8% feel that ATM using charges are high and they are not satisfied. A further analysis shows that 45% respondents used their debit cards for bills payments and 55% respondents are not using it for bill payment purpose. It is analysed that maximum number of respondent i.e. 58.6% prefer to using their ATM cum Debit card for purchasing in market but 41.4% have shown their dislike. It is revealed that 89.4% of the respondents think that Debit card is safer as compared to carry the cash at the time of shopping and traveling and 10.6% respondents think otherwise. It is found that 81.9% of the respondents are satisfied with ATM machines and its services but 18.1% respondent accessing ATM are not satisfied. As per the observation 86.8% respondent’s banks are providing credit cards in which 38.9% respondents are using it. On the other hand, 13.2% of respondent stated that their banks are not providing credit cards and 61.1% respondents are those who are not using it. It is analysed that 68.3% feel that credit card charges are heavier and 31.7% deny this. As per respondents’ feedback, it is found that 76.3% respondent thinks that use of Debit card is better than Credit card and 23.7% negated this statement. It is also found that 81.2% thinks that card transaction is safe and secure and 18.8% respondents has shown negative attitude. It is revealed that 46.9% respondent encountered processing error while transacting with card and 53.1% has shown positive attitude. It is also found that 88.1% respondent’s banks provides Internet banking and 85% respondent’s banks provides online banking and 11.9% stated that their bank do not provide internet and 15% respondents also stated that their bank is not online e-banking services. On the basis of analysis of respondents feedback it is found that 90.6% respondents feel that online banking system save time and 74% say that it is financially secured. But 9.4% and 26% respondents do not agree for that online system is save and financially secured. It is found that 81.1% respondent think that learning to use a net banking/online banking is easier but 18.9% disagree with this statement. As per the feedback of respondents that 72.6% are aware that their bank provides mobile banking services and 27.4% respondents said no. It is further observed that 77% respondents’ think that mobile banking services are more useful but 23% do not agree. It is found that 80.3% respondent’s bank provides EFT and 80.9%
respondents feel that it is more secure and time saving but 19.7% respondents deny
that their banks provides EFT services and 19.1% said that it is not safe and secure.
On the basis of the above analysis, the conclusion of the study may be drawn.

iii) Application of Chi-square test: The third part of the study is based on the
application of statistic tool i.e. Chi-square test. A variety of statistical tests are
available for analyzing a given set of data. An appropriate statistical test for
analyzing a given set of data is selected on the basis of scale of measurement of the
data, dependence/independence of the measurements, Number of populations being
studied and specific requirements such as sample size, shape of population
distribution, and so on. Here, we have used the Test of independence for testing
predetermined hypothesis.

x) Conclusion:
On the basis of the analysis, it can be concluded that the usage of banking services
is still not wide open. In a country like India, where majority of population is less
educated and uneducated, the utility of banking services is not properly realized. It
is found that only educated, well to do persons and male population forms the
majority of the users. Housewives, small businessmen and persons from
unorganized sectors still feel shy and keep themselves away from the banking
services. From the above, this can be concluded that there is an urgent need of
spreading the awareness among the common people. The small business men, the
farmers, the housewives, the person’s working in unorganized sector be convinced
to use banking and e-banking services. They should feel that their money is more
safe and secure with the banks. The lack of faith in the banking system is evident
from the present study.

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