E-Banking: Opportunities and Challenges from Customer’s Perspective

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ABSTRACT: Opportunities and Challenges of E-Banking were empirically discussed. A researcher conducted a field investigation to collect the responses from the target audience. In the Technology Era, E-Banking has started to dominate the entire world. The presence of E-Banking can be seen till the tail end of small vicinities. Villagers also use it as it stops them from visiting bank branches. This increases trust as banks use high-end software for their banking system. The study was conducted in different parts of Chennai City. 210 customers were met in different parts of Chennai City. The places of research investigation covered by the researcher are shopping malls, Banks, Colleges, Universities, Business Outlets, and Residential Areas. Furthermore, the researcher used snowball sampling in the research as he collected the references of friends, family members, and colleagues. Descriptive Research Design was used by the researcher.

Keywords: E-Banking, ATM, ECS, ETF and Telephone Banking

I. INTRODUCTION

To attract customers, banks offer a variety of services and products, such as credit cards, debit cards, advances, computerized financial services, and unexpectedly, personal services and administrations. Nevertheless, numerous commercial banks offer some basic modern services.

There are other terms used to refer to electronic banking, including web-based banking, e-banking, virtual banking, web banking, and online banking. It is only the use of electronic and telecommunication networks for the delivery of various financial services and goods. A customer can access their account information and handle multiple transactions using their computer or mobile device using e-banking. The main focus of this research is to throw light on overall opportunities and challenges of Electronic Banking that emanate from different aspects.

As far as opportunities of e-banking are concerned, customers gain many opportunities after getting resulted in various vital elements such as e-banking reduces the time, it denies unauthorized access, transactions are encrypted, bills are settled online, it ensures immediate fund transfer and it also provides uninterrupted banking services all the time. However, e-banking are subjected to certain challenges such as some organizations use outdated software, lack of connectivity to small hamlets, people from rustic areas do not have operational knowledge about electronic banking, poor internet connection and banks charge hidden fees from the customers.

With the rapid development of technology in the banking sector, still there are ifs and buts as and when availing e-banking services. E-banking poses many challenges in real-time to its customers. In the first stanza, people in the villages are not fully accessible to e-banking services due to their poor literacy level. They are still afraid of using e-banking due to a lack of knowledge in e-banking. Similarly, many banks have not designed their e-banking websites in local languages leaving the customers in the lurch. The communication barrier proves to be fatal. Even though there is the emergence of the latest technologies and software, some banks do not adopt such technologies as it is a costly affair.

In case of natural calamities like cyclones, floods, heavy rainfall, etc., e-banking services are the worst hit and people cannot do any banking transactions until the situation returns to normalcy. In the recent past, the mig-jam cyclone devastated many parts of some districts in Tamil Nadu. Due to this, people could not move out of
their homes and there were instances of water inundation and power shut down for 3 to 4 days. These pose bigger challenges in e-banking.

SERVICES UNDER E-BANKING

Mobile Banking: The term "mobile banking," or "M-banking," refers to the process of exchanging or exchanging accounts, paying bills, applying for credit, checking balances, and completing other financial operations using a mobile device, such as a cell phone or Personal Digital Assistant (PDA).

Electronic Clearing System (ECS): For busy people, the Electronic Clearing System is a useful tool. An individual’s savings bank account is used to pay their credit card bill as a result of this provision, so they don’t have to worry about making late or missing payments.

Smart Cards: A smart card is one that, rather than using the magnetic stripe used on debit and credit cards, saves data on a microchip, memory chip, or microprocessor. Smart cards can be used for a variety of identifying purposes; they are not just for sending or receiving financial information. Smart card exchanges are encrypted or jumbled to protect data transfer between parties. Every encrypted exchange is unhackable and only transmits the minimum amount of data needed to complete the exchange or transaction.

Electronic Fund Transfers (ETFs): Electronic funds transfer (EFT) is the electronic exchange of cash from one bank account to another personal account at the same bank or other financial institutions or with multiple institutions using personal computer-based frameworks. Without the direct intervention of bank employees.

Telephone Banking: Telephone banking is a service offered by a bank or other financial fund or other financial institutions that allows customers to make various financial transactions by telephone that do not involve cash or financial instruments, without visiting an ATM or bank. a branch.

Internet Banking: Internet banking is a tool provided by banks that allows account holders to access their record information over the web or the Internet. Internet or online banking is otherwise known as "online banking" or "Internet banking". Internet banking operating through conventional banks allows customers to complete all common transactions, such as bill payments, balance inquiries, stop payment inquiries, and balance inquiries. Some banks even offer online credit card and loan applications. Account information can be retrieved day or night and should be accessible from anywhere.

Home banking: Home banking is the most common way to exchange money from your home instead of a bank branch. This includes making inquiries, transferring cash, paying bills, applying for credit, and directing deposits.

II. LITERATURE REVIEW

Focused on a regional bank, this article examines complete computerization through E-Banking, targeting savings bank customers and displaying a commitment to entire banking automation and IT-based service integration [1]. This study examines the relationship between e-satisfaction, e-trust, and e-loyalty in the Indian banking sector, addressing the impact of digital disruption on the industry and identifying customer-centric strategies as essential to market survival [2]. The study, which assesses Coimbatore customers’ opinions on online banking, emphasizes the complexity of e-banking, focusing on electronic money transfer and the role played by private sector banks in using technology [3]. The study, which looked at how e-delivery channels affected bank productivity in India, found that there were positive correlations between various bank groups, with foreign and new private sector banks outperforming their peers. This highlights the importance of IT in post-e-banking productivity [4]. Focusing on plastic cards in modern banking, the article addresses the global trend towards plastic money, recognizing technology’s role in changing financial transactions globally [5]. The study looks at the rise in e-banking adoption among rural customers in India and credits digital infrastructure advancements, government initiatives, and the critical role that mobile banking plays in removing obstacles to financial inclusion and economic development [6].

Examines how technology has changed Indian banking, highlighting the move to technology-driven services and tackling adoption barriers. Provides advice for seamless integration [7]. Focuses on RBI guidelines while discussing the advantages and difficulties of IoT deployment in banking, demonstrates how IoT may boost banking security, contribute to economic growth, and offer recommendations for the banking and financial industry [8]. Acknowledges the critical role played by the banking industry in India’s post-reform economic
growth. examines the new banking paradigm, defines generation banks, and highlights cutting-edge channels and products [9]. Discusses the issues with e-banking security in light of the rise in card and smartphone transactions. focuses on voice recognition, blockchain, and data encryption for safe online banking transactions [10]. Examines, using data from 2010 to 2019, how e-banking affects the performance of Indian banks. Due to India's developing position, high implementation costs, and shifting customer attitudes regarding e-banking, mixed results have been reported [11]. Discuss the growth of electronic banking, emphasizing security dangers and obstacles and offering remedies [12].

Explores the change from traditional banking to e-banking in India, emphasizing the relevance of channel management strategies [13]. Draw attention to the difficulties in implementing cyberbanking in India, especially in rural regions, and connect demographic considerations to the low uptake of this technology [14]. The review also describes the changing landscape of e-banking in India, with initiatives from the government and Reserve Bank of India influencing its growth [15]. Discuss the revolutionary potential of internet technology for Greek banks, emphasizing the drive to address customer expectations through e-banking [16].

Research Gap witnessed in the study is that place of research is Chennai where sizeable popular keep on using the electronic banking services relentlessly. They reap the benefits of electronic banking services in the form of opportunities and such aspects are not covered in erstwhile research work. In this aspect, it deems to be unique in nature and pragmatic in approach.

1. RESEARCH QUESTIONS
   • What are the opportunities and challenges of E-Banking?
   • How is the contentment of consumers measured in terms of E-Banking Services?

2. HYPOTHESES STATEMENT
   • There are Opportunities as a result of using E-Banking Services.
   • There are challenges in E-Banking Services as and when they are used by Customers.

III. MATERIAL AND METHOD

A researcher made use of both sources of information such as Primary and Secondary Sources of Information. Primary Sources were obtained by holding research interview with target respondents at the selected places of Chennai City. The responses thus collected were statistically processed by using t test, Exploratory Factor Analysis and Two Path Analysis. However, secondary sources have come from referring to previously published research articles, erstwhile research works of similar topics, magazines, books and web sources etc. The investigation was carried out by the researcher into Opportunities and Challenges of E-Banking from Customers in Chennai City. In this regard, a well-structured questionnaire was developed to meet the objectives of this research. In all, 210 customers were met in different parts of Chennai City. The places of research investigation covered by the researcher are shopping malls, Banks, Colleges, Universities, Business Outlets, and Residential Areas.

Furthermore, the researcher used snowball sampling in the research as he collected the references of friends, family members, and colleagues. Descriptive Research Design was used by the researcher. Five-point Likert Scale was put to use depending on the requirements of the data collection. SPSS and AMOS latest version were applied to elicit the responses of collected data.

1. OBJECTIVES OF THE RESEARCH
   • To elaborately discuss the opportunities and Challenges of E-Banking,
   • To examine the contentment of customers with E-Banking Services.

2. IMPORTANCE OF THE STUDY

E-banking is of modern origin and it has slowly replaced offline banking due to the advancements of Technology. Information and Communication Technology has started revolutionizing the entire industry. The
Banking Industry is no exception to this. E-banking reduces the presence of customers at bank branches and increases the trust among the customers by enhancing security. So, post-pandemic, people across the world are accustomed to using E-banking as it enables customers to view their account balances and other financial transactions online. In the same way, bill payment is made instantaneously without any interruption. LIC Premium, Electricity Bills, Property Taxes, and Water Tax are paid via E-banking platforms. Therefore, customers need not wait to settle the bills of anything like before.

The Banking Industry wants to cause convenience to its customers mainly for customer retention. Because of the stiff competition in the banking industry, even public sector banks also offer a wide variety of E-banking services thereby retaining their customers for a long time. They render the services on par with private sector banks and they offer the loans through a verification process. So, the physical presence of customers is no more online verification is done and the loan is sanctioned soon after this.

3. NEED FOR E-BANKING

The presence of E-Banking can be seen everywhere in the world as it impacts almost all industries. Business activities cannot be done without the assistance of E-Banking. Many people have started using E-Banking services Customers, Businessmen, Industrialists, and others. After E-Banking services were brought into effect, people avoided visiting bank branches and they could do their banking and other financial transactions online. Similarly, the Cost of Operation of E-Banking activities is less due to the direct contact between buyers and sellers. So, possibilities of middlemen are ruled out. People may buy the commodities anywhere across the world. Therefore, exploiting the consumers is curbed and they are at their liberty in terms of buying the products of their preferences and choices.

IV. DATA ANALYSIS

1. ONE-SAMPLE T-TEST FOR OPPORTUNITIES AND CHALLENGES OF E-BANKING

To test the significant difference between opportunities and challenges of e-banking with Test Value, a single sample t-test has been performed, and the following null hypothesis was made:

\[ H_0(1): \text{There are no significant differences between opportunities or challenges of e-banking with test value.} \]

Table 1. Single Sample t-Test for Opportunities and Challenges of E-Banking Test Value = 20

<table>
<thead>
<tr>
<th></th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opportunities of E-Banking</td>
<td>12.783</td>
<td>209</td>
<td>.00***</td>
<td>3.89524</td>
</tr>
<tr>
<td>Challenges of E-Banking</td>
<td>19.992</td>
<td>209</td>
<td>.00***</td>
<td>4.89048</td>
</tr>
</tbody>
</table>

*** denotes significance at a 5% level

From the above Table 1, it is inferred that one sample t-test has been used to ascertain whether there are differences between opportunities and challenges of E-banking from test Value. Since p values in both cases such opportunities of e-banking and challenges of e-banking are less than .05. Formulated null hypothesis i.e. “Opportunities and Challenges of E-Banking are not significantly different from Test Value (20)” is rejected at 95% confidence level. It is further stated that e-banking has many opportunities for customers so it is a challenge.

2. EXPLORATORY FACTOR ANALYSIS FOR OPPORTUNITIES AND CHALLENGES OF E-BANKING

Table 2, describes the exploratory factor analysis for opportunities and challenges of E-banking. Furthermore, Table 2 also shows the Initial Eigen Value, percentage of variance explained, KMO measures of Sample Adequacy, Chi-Square estimate, Degree of Freedom, and Significance.

Table 2 indicates that Extraction estimates for Opportunities and Challenges of E-Banking are .658 and .612 respectively while the initial eigenvalue comes to 1.316. It means that as a result of EFA, one factor was extracted while % of variance explained stood at 65.780. KMO Sample Adequacy is .500. The estimates have indicated that e-banking has both opportunities and challenges for its users.
Table 2. EFA for Opportunities and Challenges of E-Banking

<table>
<thead>
<tr>
<th></th>
<th>Obtained Estimates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opportunities of E-Banking</td>
<td>.658</td>
</tr>
<tr>
<td>Challenges of E-Banking</td>
<td>.612</td>
</tr>
<tr>
<td>Initial Eigen Value</td>
<td>1.316</td>
</tr>
<tr>
<td>% of Variance Explained</td>
<td>65.780</td>
</tr>
<tr>
<td>Kaiser-Meyer-Olkin Measure of Sampling Adequacy Bartlett’s Test of Sphericity</td>
<td>.500</td>
</tr>
<tr>
<td>Approx. Chi-Square</td>
<td>21.771</td>
</tr>
<tr>
<td>df</td>
<td>1</td>
</tr>
<tr>
<td>Sig.</td>
<td>.000</td>
</tr>
</tbody>
</table>

3. TWO PATH ANALYSES

Path analysis is a form of multiple regression statistical analysis that is used to evaluate causal models by examining the relationships between a dependent variable and two or more independent variables. This results in a model showing causal mechanisms through which independent variables produce both direct and indirect effects on a dependent variable. Researchers have developed this model to ascertain the relationship between manifest and latent variables. Standardized Regression Estimates have been computed for all the manifest variables whereas covariances also were computed to locate the inner relationship between residuals.

Furthermore, the table also highlights the standard error and critical ratio for all the manifest and latent constructs along with their estimates. The following null hypotheses were spelled out:

\[ H_0(2): \text{There is not any underlying relationship between the Opportunities and Challenges of E-Banking.} \]

![FIGURE 1. Path analysis](image-url)
Table 3. Underlying Relationship Between Manifest Constructs and Latent Variables

<table>
<thead>
<tr>
<th>Manifest Factors</th>
<th>Latent Constructs</th>
<th>Estimate</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
<th>H0</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPP1</td>
<td>Opportunities of E-Banking</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OPP2</td>
<td>---</td>
<td>1.260</td>
<td>.167</td>
<td>7.564</td>
<td>***</td>
<td>Reject-H0</td>
</tr>
<tr>
<td>OPP3</td>
<td>---</td>
<td>1.604</td>
<td>.184</td>
<td>8.704</td>
<td>***</td>
<td>Reject-H0</td>
</tr>
<tr>
<td>OPP4</td>
<td>---</td>
<td>1.406</td>
<td>.176</td>
<td>7.993</td>
<td>***</td>
<td>Reject-H0</td>
</tr>
<tr>
<td>OPP5</td>
<td>---</td>
<td>1.101</td>
<td>.148</td>
<td>7.448</td>
<td>***</td>
<td>Reject-H0</td>
</tr>
<tr>
<td>OPP6</td>
<td>---</td>
<td>1.604</td>
<td>.192</td>
<td>8.361</td>
<td>***</td>
<td>Reject-H0</td>
</tr>
<tr>
<td>CHALL1</td>
<td>Challenges of E-Banking</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHALL2</td>
<td>---</td>
<td>.695</td>
<td>.061</td>
<td>11.340</td>
<td>***</td>
<td>Reject-H0</td>
</tr>
<tr>
<td>CHALL3</td>
<td>---</td>
<td>-.085</td>
<td>.078</td>
<td>-1.080</td>
<td>.280</td>
<td>Accept-H0</td>
</tr>
<tr>
<td>CHALL4</td>
<td>---</td>
<td>-.135</td>
<td>.075</td>
<td>-1.804</td>
<td>.071</td>
<td>Accept-H0</td>
</tr>
<tr>
<td>CHALL5</td>
<td>---</td>
<td>-.085</td>
<td>.070</td>
<td>-1.210</td>
<td>.226</td>
<td>Accept-H0</td>
</tr>
<tr>
<td>CHALL6</td>
<td>---</td>
<td>-.116</td>
<td>.070</td>
<td>-1.661</td>
<td>.097</td>
<td>Accept-H0</td>
</tr>
</tbody>
</table>

*** denotes significance at a 1% level

The above Table 3 enunciates the underlying relationships between latent constructs and six manifest variables of Opportunities of E-Banking namely (Round-clock banking, Immediate Fund Transfer, Online Settlement of Bills, Encrypted Transactions, Denial to Unauthorized Access, and reduced time) however, such fundamental relationships were carried out between challenges of E-Banking and six manifest variables (Hidden Charges, Poor Internet Connection will hamper the e-banking services, No e-banking services to interior villages, Lack of knowledge about e-banking, No connectivity to interior villages and Usage of Outdated Software). From the test results, p values are less than .01 for all the six variables of Opportunities of E-banking, and null hypotheses are rejected while in four cases of Challenges of e-banking, p values are greater than .01. Therefore, formulated null hypotheses, challenges of e-banking with its four variables are accepted.

4. FINDINGS FROM THE STUDY

- In the first finding, the researcher tried to identify the differences between the opportunities and challenges of e-banking, from the test results, p values in both cases such as opportunities of e-banking and challenges of e-banking are less than .05. Formulated null hypothesis i.e., “Opportunities and Challenges of E-Banking are not significantly different from Test Value (20)” is rejected at 95% of confidence level. It is further stated that e-banking has many opportunities for customers so it is a challenge.
- It indicates that Extraction estimates for Opportunities and Challenges of E-Banking are .658 and .612 respectively while the initial eigenvalue comes to 1.316.
- It means that as a result of EFA, one factor was extracted while % of variance explained stood at 65.780. KMO Sample Adequacy is .500. The estimates have given the indication that e-banking has both opportunities and challenges for its users.
- It is also found that by using two path analyses, p values are less than .01 for all the six variables of Opportunities of E-banking, and null hypotheses are rejected while in four cases of Challenges of e-banking.
banking, p values are greater than .01. Therefore, formulated null hypotheses, challenges of e-banking with its four variables are accepted.

5. RESEARCH DISCUSSION

There are two important findings that coincided with the findings of erstwhile studies. These findings were well illustrated by the expert named Davis in his Technology Acceptance Model in 1989. The uniformity of findings between these studies is people adopt electronic banking services because of the simplified process and it reduces transaction time. However, secondly, transactions are highly encrypted due to which people opted for e-banking services.

6. SUGGESTIONS

- Banks should provide round-the-clock security to all the users of E-Banking as it issues many practical challenges. Customers are exploited through vulnerable banking websites. Sometimes, malware is designed to disrupt or damage the Online Banking System. Bank’s websites are hacked due to this malware. Therefore, banks must use the most updated software in their routine e-banking activities.
- All e-banking transactions should be highly encrypted and unique passwords must be provided to the users and issue statutory warnings as to how to get rid of malicious e-banking transactions.
- In case of any unauthorized access by the stranger, a warning signal must be at once issued to the concerned consumers. Banks must remind customers to change their passwords at frequent intervals. Some consumers avail of e-banking services with the same user ID and Password. So, they should be alerted of changing their passwords at frequent intervals.
- Consumers should be advised to regularly check their account balance soon after they complete the transaction. In case of any unauthorized access by the stranger, a warning signal must be immediately issued to the concerned consumers. Banks must remind customers to change their passwords at frequent intervals.
- People using the e-banking services must not share their Passwords with strangers at any cost. In the same way, never use ATMs that are situated in isolated places. Because they are vulnerable to safety.

V. CONCLUSION

This study portrays the opportunities and challenges of E-Banking from a Consumer’s perspective. Customers must have safe e-banking services by adhering to the guidelines issued by the bankers and RBI at intermittent intervals. E-banking is an alternative to the conventional banking system but it is more effective than traditional banking. Consumers must have fair literacy on E-Banking. Consumers do not respond to any unknown messages received from either SMS or Mail Messages. Similarly, Account numbers must not be shared with anyone. E-banking provides many opportunities to customers and it reduces the processing time of banking transactions it takes a short while and transactions are executed promptly due to the presence of E-Banking.

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