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## **A COMPARATIVE STUDY OF CUSTOMER SATISFACTION WITH ONLINE BANKING SERVICES WITH REFERENCE TO SBI AND HDFC BANK IN BANGALORE CITY**

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### **Abstract:**

Traditional banks provide a wide range of services to its clients, including collecting deposits of customer money, offering different financial services to clients, and extending loans to both people and businesses. E-banking services are transforming how business is done in a similar way. The traditional banking system has been gradually replaced by electronic-based business models, and nearly all banks are reconsidering their business process, designs and customer relationship management methods. It is often referred to as electronic banking or online banking, which offers a number of different e-channels as alternatives to using banking services, such as ATMs, credit cards, debit cards, internet banking, mobile banking, electronic fund transfers, electronic clearing services, Cash Deposit Machines, etc. However, in terms of the Indian e-banking backdrop, CDM and ATM are the most widely used e-channels. This article focuses on long-term trends in e-banking through a literature review and an analysis of upcoming research. Future trends encompass both short-term predictions of the upcoming occurrences and long-term megatrends. Some significant trends are identified as a result of the investigation based on their potential influence on banking services. Future E-banking services are examined and considered in light of the major trends.

**Keywords:** e-Banking services, Customer value, Convenience, Safety and security, Future predictions

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## 1. Introduction

Two basic methods can be used to provide e-banking. First, in addition to the traditional channel, an established bank with physical locations can create an online presence and provide e-banking services to its clients. E-banking is typically offered at no additional cost to the customer. Customers are drawn to e-banking through the Internet because it is convenient, and banks may run more smoothly when customers make transactions on their own rather than visiting a branch and dealing with a branch staff. Customers receive e-banking services via the web and the Hypertext Markup Language (HTML) on the Internet. Customers require Internet connectivity and web browser software to use e-banking services. Web browsers can display multi-day information from online banks in HTML format[1].

The heart of the e-banking application is the computer system, which includes web servers, database management systems, and web application programs that can generate dynamic HTML pages. Bank customers' account and transaction information is stored in a database, a specialized software that can store and process large amounts of data in high speed. The function of the web server is to interact with online customers and deliver information to users through the Internet. [2]When the web server receives a request such as an account inquiry from an online customer, it requires an external web application program to process the request. C, Visual Basic, VBScript, and Java are some of the languages that can be used to develop web application programs to process customer requests, interact with the database, and generate dynamic responses. Following that, the web server will send the HTML response files to e-banking users. A few of banks, including NationsBank, also make use of cutting-edge imaging technology that let

clients view photographs of checks and bills online.

Security is one of the key issues with e-banking. Customers are hesitant to see their financial information online and make financial transactions using a public network, such as the Internet, since they lack confidence in security. Theft of private information and invasion of privacy are two examples of security issues. Banks that offer e-banking services provide a number of ways to guarantee a high level of security:

(i) **Identification and Authentication:** To ensure that only authenticated clients can access their accounts, an online bank must be recognized by a recognized Uniform Resource Locator (URL) or Internet address. Clients are often identified by their login ID and password.

(ii) **Encryption:** Secondly, all communications between consumers and online banks are encrypted to prevent hacking, even if the communication is intercepted over the Internet. Secure Socket Layer (SSL) is the particular encryption technology used by most browsers. Users do not need to take any further actions to set up the programme because it is already included in the web browser programme.

(iii) **Firewalls:** To safeguard the servers and bank databases from outside intrusion, banks have installed firewalls, which are either software or hardware barriers between the internal corporate network and the public Internet. For instance, Wells Fargo Bank did not connect to the Internet until it had set up a firewall and ensured that it was sufficiently impenetrable.

The risks associated with such arrangements must be carefully considered by the institutions. A significant risk area is the security. The borders of geography are broken by "Net Banking." It will be challenging to impose regularity constraints on such transactions[3]. There are numerous occasions when a bank

representative may be needed by the banker when conducting online transactions. While customer service professionals at brick and mortar banks are simpler to talk to, while using internet banking, where customer service numbers are provided, bankers report difficulty in resolving issues.

Sometimes there is congestion in the network and they have to wait for some time, in order to talk to the bank's representative at the other end. Although E-banking involves risk and imposes certain problems, there are many facilities provided by it. To avail these benefits, it is important for one to educate client about the risks, and the steps he can take to protect his financial information. It is also necessary to understand the rights and responsibilities as an online banking consumer, in order to make a difference to one's own financial well-being.

A paradigm shift in banking operations has been brought about by enormous technological advancements and the aggressive incorporation of information technology. The globe has become a global village thanks to the advancement of information technology, which has also revolutionized the financial sector. The banks seem to be moving quickly towards IT-based goods and services. Customers of banks are growing increasingly demanding, and banks are only able to effectively meet their needs thanks to their extensive use of technology. Technology is becoming the primary driver of fast development. IT is no longer limited to management information systems or seen as merely transaction processing. The banking sector now offers new opportunities thanks to the winds of liberalization, globalization, and privatization, which have created a highly competitive market. [4]India's post-liberalized banking sector has noticed a significant change from a seller to a buyers' market. Additionally,

the introduction of E-banking and reforms to the banking industry have fundamentally altered the way that banks provide their services and make managerial choices that affect operational efficiency, profitability, and productivity. One of the newest innovations in Indian banking is e-banking, which is uniquely strengthening the banking industry and enhancing customer service. It has made it possible for banks to process electronic payments and interbank settlement quickly and in big quantities. [5]There is a rise in client happiness, a drop in banking operating costs, and a rise in productivity; as a result, Indian banks have a huge opportunity to expand their E-banking services, which might boost their competitiveness. Furthermore, new technology has quickly changed how banks conduct business in the past. With just a few keystrokes, customers may monitor their accounts, obtain account statements, transfer funds, and buy drafts. The availability of ATMs, plastic cards, EFT, electronic clearing services, online banking, mobile banking, and phone banking has greatly reduced the number of times consumers must visit branch locations and has given them access to a greater range of services.

#### **Purpose and Importance of the Study**

As e-banking services reach out to the doorsteps of the people, traditional banking services are likely to disappear in the years to come. Future e-banking services will probably offer a wider variety of options. Some banks intend to introduce electronic cheques and money. Consumers can use electronic money to make small-value purchases online using computers or smart cards that hold the currency. Electronic cheques will resemble paper cheques in appearance, but they can be delivered electronically from buyers to sellers for electronic endorsement and electronic delivery to the seller's bank for electronic collection from the buyer's

bank. Additionally, banks aim to provide their clients with a wider range of goods and services, including brokerage, insurance, mortgage, and financial planning. Customers will receive greater value as a result, and banks will benefit from increased sales and revenue[6].

### **Objectives of the Research Study**

The following is a list of the researcher's specific study objectives[13]:

1. To compare State Bank of India (SBI) and HDFC Bank (HDFC), two banks in Bangalore in terms of the numerous factors those are important for customer satisfaction.
2. To gauge customer satisfaction with State Bank of India's (SBI) and HDFC Bank (HDFC)e-banking services.
3. To identify the key factors that is boosting the satisfaction of both State Bank of India's (SBI) and HDFC Bank (HDFC) customers.

### **Review of Literature**

According to Suresh (2012), the development of e-banking technology has given banks unexpected chances to plan their financial products, profits, service delivery and marketing. The study's goals were to compare traditional banking to e-banking and to discover the essential features that make e-banking effective. According to the author's analysis, e-banking will be innovative if it maintains both the business model and technological know-how and disruptive if it destroys both. Additionally, he distinguished between e-banking and traditional banking in five ways: value network, market scope, cost structure and profit potential. A better future for the Indian economy depends on banks attracting more consumers both inside and outside of India in order to fully utilize the technological and commercial potential of e-banking.

Liao and Wong (2013) conducted an empirical investigation into the key issues surrounding internet-enabled e-banking

systems and carefully analyzed the factors that influence how customers interact with these services. The respondents were asked to describe the extent to which they used internet banking services in order to research how customers interacted with online banking. According to the findings, perceived utility, usability, security, comfort, and response to service requests greatly contributed to the explanation of the difference in customer interactions. These constructs were found to be relevant and reliable by exploratory factor analysis and reliability testing. 58 of them have significant convergent and discriminatory validities, according to confirmatory factor analysis. The perceived utility and perceived usability of e-banking services both have a big impact on how customers interact with them. The main factors influencing client encounters were perceived convenience, security, and responsiveness.

Gabriel et al. (2014) tried to assess client happiness and the caliber of banking services. The authors polled 11936 bank clients in Brazil. They looked at five aspects of these banks' services to evaluate them: 1. Customer relationships; 2. Business and financial transactions; 3. Information technology; 4. Brand; and 5. Image of the bank. The first two of these five characteristics have a notably greater impact on customer satisfaction than the other four. The author emphasized the need for extreme caution while offering customers high-quality services due to how quickly information technology develops. Additionally, with the development of information technology, banks should diversify their offering of services to prevent clients from switching to a rival institution.

## **2. Research Methodology**

**Research Design:** The comparison of E-banking service satisfaction between SBI and HDFC banks is the focus of the current

study. As a result, the study project has been supported by a hybrid descriptive-analytical research design.

**Research tools:** In order to elicit the information, the research tools were utilized in the questionnaire. The questionnaire was altered after the researcher conducted a pilot study to better suit the needs of the research project. In the majority of places throughout the research project, the researcher employed open-ended and closed-ended questions, which might be considered a research instrument for the current study.

**Research Variables:** The researcher split the total number of variables into dependent and independent variables. Customers' income level and age are referred to as dependent variables, whereas the performance of the SBI and HDFC banks is considered an independent variable. Safety reliability, transaction efficiency, customer support, and service quality are all considered independent variables[7].

**Sample size:** A total of 190 people were included in the sample for this investigation. 88 of those clients were questioned by the State Bank of India, and another 102 by the HDFC Bank

**Sample Area:** The researcher did his investigation in the two banks, State Bank of India (SBI) and HDFC Bank), which were previously mentioned. Only after receiving permission from the relevant lenders did the researcher engage in conversation with the clients.

**Sampling type:** Multi stage sampling has been used in the study to show how satisfied customers are with two banks' online banking services in Bangalore.

**Data sources:** For the purposes of this study, the researcher used two sources to gather data: primary sources and secondary sources. While secondary data were gathered through publications, websites, books, and articles, primary data came directly from the respondents through a well-structured questionnaire[8].

**Statistical tools:** The art of producing an article is based on the use of powerful statistical methods during the research process. ANOVAs and Chi Square are two of the statistical methods used in the current investigation.

### 3. Data Analysis and Results Discussion:

Table 1 Chi – Square test for satisfaction level toward e-banking services between SBI and HDFC banks and income status of customers

Satisfaction level towards e-banking services	Income	10000-20000	21000-30000	31000-40000	Above 40000	Total
SBI	Yes	9	16	9	11	45
	No	8	11	8	16	43
HDFC	Yes	15	17	15	9	56
	No	19	7	11	9	46
		9	16	9	11	45

Table 4.1: Source: Primary data

From the above table, it is inferred that satisfaction level towards e-banking services between SBI and HDFC banks

and income status of customers are tested under chi-square test at 5% level of significance. Both customers of SBI and



HDFC have expressed their views towards e-banking services depending on their income[9].

**Chi-Square**

To determine whether there is any association between satisfaction level towards e-banking services and income level.

**Null Hypothesis**

There is no significant association between satisfaction level towards e-banking services and income level.

**Alternate hypothesis**

There is a significant association between satisfaction level towards e-banking services and income level.

Chi-Square	Value	Df	Significance
Pearson Chi-Square (SBI)	17.245	3	.752
Pearson Chi-Square (HDFC)	18.123	3	.186

Table 4.2: Source: Primary data

In the above table, since the significance value of chi-square is more than 0.05 the null hypothesis is accepted i.e. there is no significant association between satisfaction level towards e-banking services and income level in State Bank of India. The null hypothesis is rejected and it is concluded that there is significant association between satisfaction level towards e-banking services and income level in HDFC bank[10].

**Analysis of Variance (ANOVA)**

The following ANOVA table explains the difference between respondent’s age factor (dependent variable) and the

dimensions of independent variables of customers (safety reliability, transaction efficiency, customer support, service quality and performance) in State Bank of India (SBI).

**Age wise perception – Hypothesis**

**H0:** There is no significant difference between the age variable and the dimensions of independent variables of customers of State Bank of India (SBI)

**H1:** There is a significant difference between the age variable and the dimensions of independent variables of customers of State Bank of India (SBI).

Table 2 -Analysis of Variance (One Way ANOVA) to show significant difference between age and dimensions of independent variables of customers of SBI

Dimensions of Independent Variables	Sum of Squares	Degrees of Freedom	Mean Square	F	Sig.
Safety Reliability	3.152	3	1.021	3.223	.296
Transaction Efficiency	7.654	3	4.955	7.715	.082
Customer Support	4.532	3	1.728	4.511	.361
Service Quality	2.825	3	.851	3.014	.708
Performance	7.089	3	3.021	5.618	.058

Table 4.3: Source: Primary Data

The above table reveals that there is no significant level is more than 0.05 for safety reliability, transaction efficiency,

customer support, service quality and performance. Therefore, the null hypothesis is accepted that there is

significant difference between age group of the respondents and the dimensions of independent variables of customers of State Bank of India (SBI)[11].

#### Analysis Of Variance (ANOVA)

The following ANOVA table explains the difference between respondent's age factor (dependent variable) and the dimensions of independent variables of customers (safety reliability, transaction efficiency, customer support, service

quality and performance) in HDFC Bank.

#### Age wise perception – Hypothesis

**H0:** There is no significant difference between the age variable and the dimensions of independent variables of customers of HDFC bank.

**H1:** There is a significant difference between the age variable and the dimensions of independent variables of customers of HDFC bank.

Perception	Sum of Squares	Degrees of Freedom	Mean Square	F	Sig.
Safety Reliability	3.981	3	2.121	4.281	.358
Transaction Efficiency	8.857	3	6.027	5.749	.175
Customer Support	5.631	3	2.921	5.715	.489
Service Quality	3.729	3	1.051	4.514	.907
Performance	9.128	3	2.921	6.117	.259

Table 3- Analysis of variance (One Way ANOVA) Age Factor

Table 4.4: Source: Primary data

The above table reveals that there is no significant level more than 0.05 for safety reliability, transaction efficiency, customer support, service quality and performance. Therefore, the null hypothesis is accepted that there is significant difference between the age group of the respondents and the dimensions of independent variables of customers of HDFC bank.

#### 4. Suggestions and Conclusion

The researcher has deduced his recommendations from the table analysis in order to close the gap between the e-banking services of two banks, SBI and HDFC. Customers' level of satisfaction with the e-banking services provided by the two banks needs to be improved in a number of ways. Customers have divided their opinions on e-banking services, with half expressing happiness and the other

half disapproval. As a result, several concerns with the two banks' respective e-banking services—such as server outages and a lack of e-banking facilities in villages—remain unresolved. Performance, transaction efficiency, etc., fall short of expectations[12].

The level of service quality of SBI Bank is different from HDFC. Therefore, it is important to improve the service quality of the two banks in order to form lasting relationships between clients and bankers. Customer service is a huge benefit for almost all clients. Some banks already have it, while others do not. Therefore, both banks' corporate offices must keep an eye on how far customer service is extended. If there is a gap in this area, immediate consequences will be considered to close it.

There are certain recommendations included in this report to stop the negative effects of SBI and HDFC banks' e-banking

services. E-banking services will revolutionize the entire world, as was mentioned in several of our earlier opinions. Therefore, the bankers must improve the quality of E-banking services in the next years to make sure that the services they provide do, in fact, please all of their clients. Additionally, bankers should have regular conversations with clients to get their input and to determine what needs to be done to address it. Above all, both SBI and HDFC banks have good client satisfaction ratings for their e-banking services. However, some issues must be resolved in advance in order to get prospective customers' attention.

## 5. Reference

1. Al-Hawari, M. & Ward, A. (2006). The effect of automated service quality on Australian banks' financial performance and the mediating role of customer satisfaction. *Marketing Intelligence & Planning*, Vol.24 No.2, pp.127-147.
2. Arunachalam, L. & Sivasubramanian, M. (2007). The future of Internet Banking in India. *Academic Open Internet Journal*, Vol. 20. Available online at: [www.acadjournal.com](http://www.acadjournal.com).
3. Al-Hajri, S. & Tatnall, A. (2007). Inhibitors and Enablers to Internet Banking in Oman - A Comparison with Banks in Australia. *International Review of Business Research Papers*, Vol. 3, No.5, pp.36 – 43.
4. Akbar, M.M. & Parvez, N. (2009). Impact of service quality, trust, and customer satisfaction on customers' loyalty. *ABAC Journal*, Vol. 29, No1, pp.24-38.
5. Agarwal, R., Rastogi, S. & Mehrotra, A. (2009). Customers' perspectives regarding e-banking in an emerging economy, *Journal of Retailing and consumer services*, Vol.16, Issue.5, pp.340-351.
6. Dixit, N. & Dutta, S.K. (2010). Acceptance of E-banking among Adult Customers: An Empirical Investigation in India. *Journal of Internet Banking and Commerce*, Vol.15 No. 2, pp 5-17.
7. Agrawal, S.(2010). Indian service sector: A case study of banking sector. *Management Insight*, Vol. VI, No. 1, pp.50-54.
8. Geetha, K.T. & Malarvizhi, V. (2011). Acceptance of E- Banking among customers (An Empirical Investigation in India). *Journal of Management and Science*, Vol.2, No.1,pp.1-9.
9. Gireesh Kumar, G. S.(2011). Internet Banking and Customer Resistance. *Science and Society*, Vol. 9, No. 1, pp. 79-88.
10. Ahmad, A.E.M.K & Hasan, A. A. (2011). E-banking Functionality and Outcomes of Customer Satisfaction: An Empirical investigation, *International Journal of Marketing Studies*, Vol. 3, No. 1, pp. 50-65.
11. Ahmed, I. & Amir, M. (2011). Service Quality; Service Features; And Customer Complaint Handling As The Major Determinants Of Customer Satisfaction In Banking Sector of Pakistan. *International Review of Business Research Papers*, Vol.7,No.1,PP.313-318.
12. Akram, S. & Asghar, N. (2012) An empirical analysis of Customer satisfaction on adoption of internet Banking in Pakistan. *Interdisciplinary Journal of Contemporary Research in Business*, Vol.3, No.9, pp. 1124-1132.
13. Addo, A. & Kwarteng, K. (2012). Customer Satisfaction of Retail Banking Service: A Study of Selected Private Banks in Ghana. *International Journal of Social Science Tomorrow*, Vol.1, No. 6, pp 1-9