

CUSTOMER PERCEPTION AND SATISFACTION TOWARDS E-BANKING SERVICE QUALITY – A STUDY IN NANDYAL DISTRICT

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ABSTRACT

Customer perception involves individuals' feelings, beliefs, and attitudes toward a product or service. In e-banking, perceived ease of use, usefulness, and privacy and security significantly influence customer attitudes and intentions to use these services. This study examines these factors as independent variables, with attitude and usage intention as dependent variables. The paper conducts a comparative analysis of customer perceptions of e-banking services, which allow users to conduct transactions digitally. In India's competitive banking environment—comprising nationalized, private, and foreign banks—service quality and speed are key differentiators. The study aims to assess how customers perceive e-banking services across different types of banks.

KEYWORDS: *E-Banking, Customer Perception, Benefits, Challenges and Security, Attitude towards E-Banking, Intention to use E-Banking.*

Introduction

"Modern technology has brought about substantial improvements in the way society functions, touching nearly every industry across the globe. The banking sector, in particular, has experienced notable changes, with digital tools and innovations streamlining operations, enhancing customer interactions, and expanding access to financial services."

E-banking is a strategic link between a banking institution and its clients (customers) that facilitates transactions in encrypted form using internet. E-banking is the short form of electronic banking, which caters to diverse requirements of the customers online. Now-a-days, banking sector across the world is using e-banking as a strategic tool to retain the existing customers and to attract new customers. E-banking delivers services by electronic means, viz., internet, smart phones, etc. and its range of services are still progressing. E-banking facilitates for effective banking transactions and accounting system and therefore accelerating the speed of banking services. In general customers use these services on the influence of bankers (Desai, R., 2020).

E-banking is valuable not only for financial transactions but also for non-financial services such as updating personal details, changing ATM PINs, checking account balances, and accessing account statements. With changing customer interaction patterns and the rise of fintechs and neobanks, digital transformation has become essential for banks. However, simply digitizing services is no longer sufficient—banks must adopt a customer-centric approach to remain competitive. Ensuring a seamless customer

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experience, fostering loyalty, addressing social concerns, and building emotional connections are now crucial. Therefore, banks must modernize their technology infrastructure to operate efficiently and contribute meaningfully to society.

Types of e-banking Services

Various banks in India are offering a range of services through e-banking platforms. These are basically classified into three types (levels):

- **Level-1:** This is a basic level service offering by many banks through their official websites. Via this service, banks provide basic information to the customers regarding their products and services. While, some other banks receives the queries from the customers and sends reply to the queries through website or by e-mail.
- **Level-2:** In the second level, few banks permit their customers to offer instructions, submit application online for various services, and verify the balance in their accounts. But, at this level, banks do not allow their customers to perform any fund-based transactions on their accounts.
- **Level-3:** At this level, banks permit their customers to handle their accounts for transfer of funds, bill payments, and buying and selling of corporate securities (investing), etc.

It may be noted from the above classification that the traditional banks majorly offer e-banking services as an extra method of offering services. Further, several new banks renders banking services mainly through internet or other e-delivery channels. But, some '*internet only*' banks with no physical branch offers services everywhere in the country. Therefore, banking websites are classified into two types:

- **Informational websites:** These websites provides basic information regarding the bank and the products and services offering to the customers. These websites do not permit the customers to perform their banking transactions.
- **Transactional websites:** Besides providing basic information regarding the bank and its products and services offering to the customers, these websites allow the customers to carry out the transactions arraying from a simple retail account balance inquiry to a large business-to-business (B2B) funds transfer.

The following table shows some familiar retail and wholesale e-banking services offered by the banks and financial institutions in India.

Table 1: Familiar e-Banking Services

Retail Services	Wholesale Services
Management of Account	Account management
Online bills payment	Management of cash
Opening of new account	Loan applications by small businesses, approvals, or advances.
Consumer wire transfers	Commercial wire transfers
Investment or Brokerage services	Business-to-business (B2B) payments.
Loan application and approval	Employee benefits
Account aggregation.	Pension administration.

Source: Researchers Compilation from multiple sources

Digital Transformation in Indian Banking – Critical Growth Factors

The following key factors are critical for the growth of digital transformation in Indian banking sector (Kazaara, A.G., and Julius, A., 2023):

- Banks while creating the awareness among the customers regarding e-banking, they should build a solid ground for trust. Being a brand, banks should have a customer base and adaptable digital platforms.
- Existing financial services offering via e-platforms have to be given added leverage to their assets.
- Banks are offering exceptional and convincing value propositions in their operational assistance, having tech masses, that are 100 per cent mechanized, witnessing a superior digital performance supported by staff dexterity.
- Managing risk in e-banking is higher and more answerable in the banking sector.

Enhancing Customer Satisfaction through E-Service Quality in Banking

In today's digital era, the quality of electronic banking services—encompassing online and mobile platforms—is pivotal in shaping customer satisfaction and fostering loyalty.

Key dimensions influencing e-service quality in banking include:

- **Reliability:** Consistent and accurate delivery of promised services, ensuring system availability and precise transaction processing.
- **Efficiency:** Swift and seamless access to banking services, minimizing customer effort and time.
- **Responsiveness:** Prompt and effective handling of customer inquiries and issues, enhancing the overall user experience.
- **Ease of Use:** User-friendly interfaces that facilitate easy navigation and transaction execution.
- **Security and Trust:** Robust measures to protect customer data and transactions, building confidence in the digital banking environment.
- **Website Aesthetics:** Visually appealing and well-organized websites that enhance user engagement and satisfaction.
- **Personalization:** Tailoring banking services to meet individual customer preferences and needs, improving service relevance and value.

These dimensions are integral to delivering high-quality e-banking services. Studies have shown that factors such as security, reliability, and responsiveness are particularly influential in determining customer satisfaction levels. Moreover, a positive perception of e-service quality has been linked to increased customer loyalty, as satisfied customers are more likely to continue using and advocating for their bank's services.



Source: Researchers Compilation from multiple sources

Review of Literature

- In their 2024 study, K. M. Anwarul Islam and colleagues investigated the factors influencing the adoption of mobile banking services in Bangladesh. Surveying 400 active banking customers, they analyzed 315 valid responses. The findings revealed that perceived trust, privacy, and security significantly impact customers' decisions to adopt mobile banking services, with perceived security having the most substantial effect ($\beta = 0.302$). Conversely, perceived risk did not show a significant influence on adoption behavior.
- Sladana Barjaktarovic Rakocevic (2023) found that digital banking usage has risen sharply due to its speed, convenience, and affordability. Her study, based on an online survey of Serbian students, revealed that most use digital banking weekly for money transfers and bill payments. Students reported high satisfaction and welcomed the technological advancements. The study suggests banks should consider student feedback when shaping digital banking models.
- Qasabah and Siddiq (2021) examined the link between customers' monthly income and their perception of e-banking in Yemen. Using a descriptive approach and survey data from 189 respondents collected via a 5-point Likert scale, the study found that customers generally hold a highly positive view of e-banking services. However, no significant association was found between income level and perception.

- Mwiya et al. (2022) noted a research gap in the study of digital banking service quality, particularly in developing countries like Zambia. To address this, they investigated the impact of e-service quality on customer satisfaction during the COVID-19 pandemic. Using data from 314 bank customers in Lusaka and Kitwe, analysed through correlation and regression models, the study found that factors such as security, website features, privacy, responsiveness, efficiency, and reliability significantly influence customer satisfaction in Zambia's e-retail banking sector.
- Ahmad et al. (2020) explored how e-service quality influences the actual use of e-banking, applying the Technology Acceptance Model (TAM). Based on a survey of 493 e-banking users in Pakistan, the study found that e-service quality positively impacts perceived ease of use, usefulness, and intention to use. These perceptions, in turn, shape attitudes and behavioral intentions, ultimately leading to increased actual usage of e-banking.

Research Gap

Overall, many studies have explored various aspects of e-banking, including customer perceptions, motivating factors for adoption, satisfaction levels, challenges faced during usage, and the influence of perceived benefits on satisfaction and adoption. Other research has examined the role of demographic variables, reasons for using or avoiding e-banking, and the link between service quality and customer satisfaction. There is a lack of integrated models that consider both **technological and service quality attributes** in evaluating customer experiences with e-banking platforms. This study seeks to address these gaps by exploring the relationship between e-service quality and customer satisfaction in e-banking, with a focus on under-researched regions.

Objectives of the Study

- The current study is carried out with the objectives given below.
- To assess customer perceptions regarding the quality of e-banking services provided by banks.
- To identify the key dimensions of e-banking service quality that influence customer satisfaction (e.g., reliability, responsiveness, security, ease of use, website design).
- To examine the relationship between e-banking service quality and customer satisfaction.
- To analyse the impact of demographic factors (such as age, income, education, and occupation) on customer perception of e-banking service quality.
- To provide suggestions for banks to improve their e-banking service quality based on customer feedback and expectations.

Hypothesis of the Study

To check whether the independent constructs are showing significant effect on dependent construct, the following hypothesis is formed.

- H01:** The effect of perceived deficiency on perception towards e-banking is insignificant.
- H02:** The effect of perceived privacy and security on perception towards e-banking is significant.
- H03:** The effect of perceived reliability on attitude towards e-banking is significant.
- H04:** The effect of perceived ease of use on intention to use e-banking is insignificant.
- H05:** The effect of perceived privacy and security on intention to use e-banking is insignificant.
- H06:** The effect of perceived reliability on intention to use e-banking is significant.
- H07:** The effect of perception towards e-banking on intention to use e-banking is insignificant.

Research Methodology

- **Research Design:** The study adopts an **empirical approach**, aiming to evaluate the perceptions of banking customers toward e-banking products and services. It also follows a **causal research design**, as it seeks to measure the influence of various independent constructs on a dependent construct, each comprising multiple dimensions. Furthermore, the research incorporates elements of an **experimental design**, as it tests hypotheses concerning causal relationships between constructs using **Structural Equation Modeling (SEM)**.
- **Population and Sample:** The bank customers who are having knowledge about e-banking products and services and residing in Nandyal district are the population for the study. The

approximate population in Nandyal district is 17.81 lakh. Using Krejcie & Morgan (1970) table, at 95 per cent level of confidence and 5% level significance (ME), for the proportion of the population (P) 0.50, the sample size for the current study (n) is 384.

Sampling Procedure, Data Collection and Analysis

For the present study, the sample respondents are chosen from the target population consisting of banking customers who have awareness about e-banking products and services. Convenient and judgment sampling methods were used to choose the sample respondents. The primary data for the present work was collected by conducting one to one interaction with customers from December 2024 to March 2025.

Results and Discussion

Level of Knowledge about various e-banking Services

e-banking Products/Services	N	Mean	Standard Deviation	Skewness	Kurtosis
Online Banking	384	3.69	.996	-.811	.206
Mobile Banking	384	3.73	.984	-.906	.527
ATM Banking	384	3.75	.977	-.977	.687
Direct Deposit	384	3.71	.949	-.946	.696
Electronic Fund Transfer	384	3.78	.975	-.974	.749
Electronic Clearing System	384	3.77	.973	-.937	.626
Electronic Bill Payment	384	3.75	.972	-.942	.679
Tele Banking	384	3.66	.975	-.874	.397
Online Bill Payment	384	3.74	.972	-.987	.773
Online Shopping	384	3.73	.989	-.506	-.145
e-Ticket Booking	384	3.76	.962	-.297	-.451
Online Lending	384	3.67	.962	-.529	-.374
Recharging	384	3.56	.994	-.490	-.327
Online Investing	384	3.60	.983	-.396	-.604

Source: Researchers calculation using SPSS.21

The descriptive statistics reveal that among the various e-banking services, 'Electronic Fund Transfer' received the highest mean score of 3.78, ranking first, followed closely by 'Electronic Clearing System' (3.77) and 'e-Ticket Booking' (3.76) in second and third places, respectively. 'ATM Banking' and 'Electronic Bill Payment' both scored 3.75, ranking fourth, while 'Online Bill Payment' scored 3.74, placing fifth. 'Mobile Banking' and 'Online Shopping' each received a mean score of 3.73, ranking sixth. 'Online Banking' followed with 3.69 (7th), 'e-Ticket Booking' with 3.67 (8th), and 'Tele Banking' with 3.66 (9th). 'Online Investing' scored 3.60 (10th), and 'Recharging' received the lowest score of 3.56, placing 14th.

All items show high mean scores, ranging from 3.56 to 3.78 on a 5-point Likert scale, indicating a generally favorable perception of e-banking services. Standard deviations range from 0.949 to 0.996, and skewness and kurtosis values for all 14 items fall within the acceptable range of -1 to +1, confirming moderate skewness and validating the normality assumption for parametric analysis.

Hypotheses Testing using Path Coefficients and p-Value

Independent Constructs (e-banking service quality)		Dependent Construct	Path Coefficient	Sig.	Decision
Website Design and Management	→	Customer Satisfaction	.251	.058	$H_{04(a)}$ is Accepted
Customer Service and Support	→	Customer Satisfaction	.633	.001	$H_{04(b)}$ is Rejected
Preferential Treatment	→	Customer Satisfaction	-.020	.948	$H_{04(c)}$ is Accepted
Provision of Information	→	Customer Satisfaction	.024	.928	$H_{04(d)}$ is Accepted
Customer Assurance	→	Customer Satisfaction	-2.413	.008	$H_{04(e)}$ is Rejected

Source: Researchers calculation using AMOS.26

The table indicates that the path coefficients for two independent constructs—*customer service and support* and *customer assurance*—are statistically significant, leading to the rejection of the null hypotheses H04(b) and H04(e). In contrast, the path coefficients for *website design and management*, *preferential treatment*, and *provision of information* are not significant, resulting in the acceptance of null hypotheses H04(a), H04(c), and H04(d).

The structural model derived from the analysis is as follows:

Customer Satisfaction = 0.251(Website Design and Management) + 0.633(Customer Service and Support) – 0.020(Preferential Treatment) + 0.024(Provision of Information) – 2.413(Customer Assurance).

Conclusion

Based on the analysis of the primary data collected from sample banking customers, the following conclusions are drawn:

- **Demographic Influence:** E-banking usage does not significantly differ by age, education, income, or residential area, but it is significantly affected by employment status.
- **Attitude and Usage Intent:** Perceived ease of use, privacy and security, and usefulness positively influence both attitude towards e-banking and the intention to use it. A positive attitude further enhances usage intention.
- **Customer Satisfaction:** Customer service and support significantly boost satisfaction, while website design, information provision, and preferential treatment have no significant effect. Notably, customer assurance negatively impacts satisfaction.

Limitations and Scope for Further Research

The Pandemic accelerated the transition from traditional to digital banking, prompting customers to adopt new digital habits. In the post-pandemic era, banks must go beyond digitization and focus on being more customer-centric by upgrading their technology and enhancing engagement. The study's findings were influenced by these changes but are limited to Kurnool district. There is considerable scope for further research, including studies across other regions and comparative analyses of public, private, and foreign banks, as well as customer perceptions of green banking.

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