

Internet Banking Challenges In The Digital Financial Services Sector

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Abstract

The rapid evolution of digital financial services has transformed the banking sector, offering customers unprecedented convenience and accessibility. However, this transformation is not without its challenges. Internet banking, a cornerstone of digital financial services, faces several issues that can impede user experience and adoption. This study investigates the key challenges in the digital financial services sector, particularly focusing on Internet banking. By analyzing various independent variables, including user confusion due to excessive options, security concerns, technical issues, and connectivity problems, the study aims to provide a comprehensive understanding of these challenges and offer actionable suggestions for improvement. This article has dealt with challenges of internet banking in the digital financial service industry.

Keywords: Internet Banking – Digital Financial Service – Challenges in Digital Finance

1. Introduction

The study identified that an overwhelming number of options within online banking interfaces significantly confuse users. This confusion can lead to a frustrating user experience, hindering the effective use of digital banking services. Simplifying the interface and streamlining options can enhance usability and ensure that customers can navigate the system with ease. Financial institutions need to prioritize user-friendly design principles to make online banking more intuitive and accessible.

Security concerns are a major deterrent for many customers when it comes to using digital banking services. The fear of cyber threats, such as phishing, identity theft, and data breaches, makes users hesitant to fully embrace online banking. Banks must implement advanced security measures, such as multi-factor authentication, end-to-end encryption, and regular security updates, to build customer trust. Additionally, educating users on safe online practices and transparent communication about security protocols can further alleviate these concerns.

Technical reliability is crucial for a seamless online banking experience. The study highlights that users often encounter instances where internet banking activities hang or freeze, causing inconvenience and disrupting transactions. To mitigate this issue, financial institutions should invest in robust IT infrastructure capable of handling high traffic and ensuring smooth operation. Regular system maintenance, updates, and stress testing can help identify and resolve potential bottlenecks, enhancing the overall reliability of digital banking services.

Internet connectivity and speed are critical factors that influence the effectiveness of online banking services. Users frequently face connectivity issues and slow internet speeds, which can disrupt their banking activities and lead to frustration. While banks have limited control over internet infrastructure, they can optimize their online platforms to perform well even under suboptimal conditions. Collaborating with Internet service providers to improve network reliability and speed for their customers can also contribute to a better online banking experience. Additionally, providing offline functionalities or low-data usage options can help mitigate the impact of connectivity issues.

By addressing these challenges, financial institutions can significantly improve the user experience and increase the adoption of internet banking services. This, in turn, will contribute to the overall growth and efficiency of the digital financial services sector.

2. Review of Literature

Several studies have investigated the challenges faced in the realm of Internet banking within the digital financial services sector. These studies highlight a variety of issues, ranging from user interface complexity to security concerns, and provide insights into how these challenges can be addressed.

A study by **Yousafzai, Pallister, and Foxall (2003)** explored the psychological and behavioral factors that influence users' adoption of Internet banking. They identified that the complexity of the user interface plays a significant role in users' reluctance to use online banking services. This finding underscores the need for financial institutions to simplify their online banking platforms to enhance user experience.

Pikkarainen et al. (2004) conducted research that highlighted security and privacy concerns as major barriers to the adoption of Internet banking. Their study suggested that enhancing security measures and building customer trust through transparent communication are crucial steps to encourage more users to engage with digital financial services.

In a comprehensive review, **Martins, Oliveira, and Popovič (2014)** examined the technological challenges associated with Internet banking. They found that technical issues such as system downtime and performance lags were common complaints among users. Their research indicated that investing in robust IT infrastructure and regular system updates could mitigate these issues and improve service reliability.

Additionally, a study by **Shaikh and Karjaluoto (2015)** reviewed literature on the factors influencing the adoption of mobile banking, which parallels many challenges faced in Internet banking. They identified connectivity issues and poor internet speeds as significant obstacles. Their findings suggest that optimizing banking applications for low bandwidth environments and collaborating with Internet service providers can enhance user satisfaction.

3. Research design and sample

In the present study descriptive research design will be adopted. Descriptive research studies are those studies which are concerned with describing the characteristics and attitude of a particular individual, or a group.

This study focuses to South Tamilnadu Private Sector Banks' Problems and Prospects of Digital Financial Services. Convenience sampling technique is applied to this study because to measure customers' opinion and perception of Problems and Prospects of Digital Financial Services. 757 Data were collected from potential respondents to understand specific attributes and opinions of Problems and Prospects of Digital Financial Services. Convenience sampling is a non-probability sampling method where units are selected for inclusion in the sample because they are the suitable for the researcher to access. This can be due to geographical proximity, availability at a given time, or willingness to participate in the research.

4. Objective of the Study

The objective of this analysis is to utilize path regression to identify and quantify the key issues affecting the performance and security of internet banking services, and to understand how these problems impact user trust and service adoption. This study aims to provide actionable insights for enhancing the reliability and security of digital financial services

5. Analysis and Interpretation

Abbreviation of Internet Banking

Abbreviation	Internet Banking (IB)
IB -1	Too much of options are confused the customer while Internet usage
IB -2	There is a reluctance to use banking services digitally due to a lack of security
IB -3	Sometime internet banking activities are hanging
IB -4	Very often occurs the Internet Connectivity issues and poor Internet speed

Table- 1. Model Fit Summary

Model	R	R-Square	Adjusted R-Square	Std. Error of the Estimate	Durbin-Watson
Internet Banking	0.904	0.818	0.817	0.28000	2.102

Dependent Variable: Internet Banking

The model reveals that the R value (Multiple Correlation Coefficient) is 0.904, indicating a strong relationship between the problems in digital financial services for Internet banking and the predicted values, which include:

- 'Too many options confuse me during Internet usage' (IB-1)
- 'There is reluctance to use digital banking services due to a lack of security' (IB-2)
- 'Sometimes Internet banking activities hang' (IB-3)
- 'Frequent Internet connectivity issues and poor Internet speed' (IB-4).

The R-Square (Coefficient of Determination) value is 0.827, meaning that over 82% of the variation in problems in digital financial services for Internet banking is explained by the variations in the independent variables (IB-1 to IB-4). The adjusted R-Square value is 0.818, which adjusts the statistic based on the number of independent variables in the model, ensuring the goodness-of-fit.

Additionally, the Durbin-Watson (DW) statistic, which ranges from 0 to 4, indicates the presence of autocorrelation. A value between 0 and 2 suggests positive autocorrelation, while a value between 2 and 4 indicates negative autocorrelation. In this case, the DW statistic is 2.102, indicating slight negative autocorrelation, which is considered acceptable.

Table- 2 ANOVA

Internet Banking	Sum of Squares	df	Mean Square	F	Sig.
Regression	200.660	4	50.165	639.881	0.000
Residual	44.686	570	0.078		
Total	245.346	574			

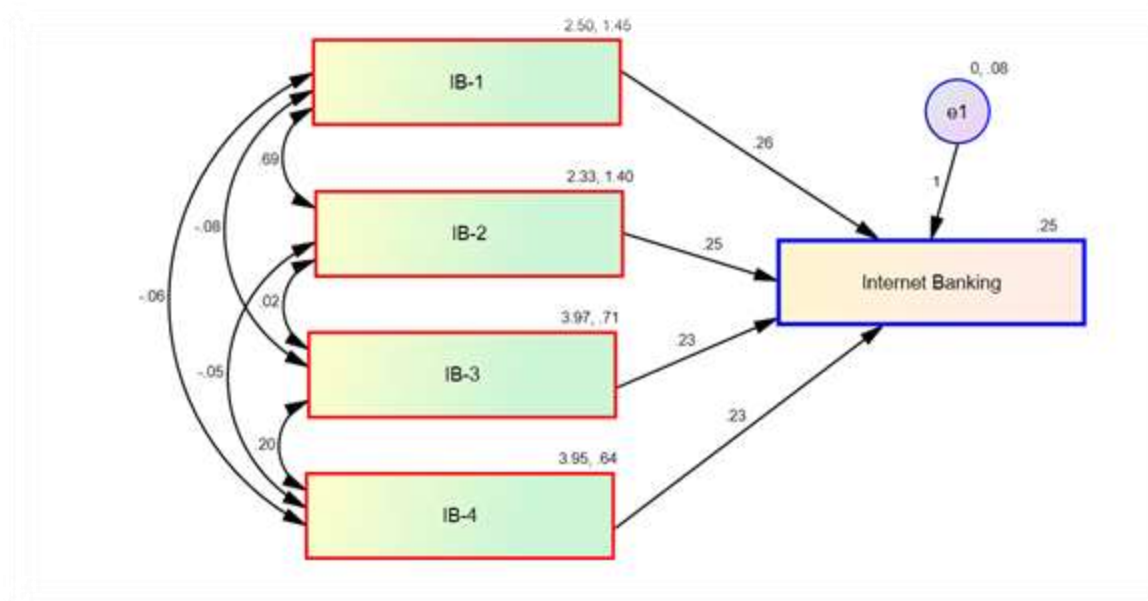
Dependent Variable: Internet Banking

The F-ratio in the ANOVA table evaluates the overall regression model, indicating that it is a good fit for the data. With an F (4,570) value of 639.881 and a p-value of 0.000, which is less than 0.05 ($p < 0.05$), the regression model demonstrates a significant linear relationship between the dependent and independent variables.

Table- 3 Regression Weights for Digital Financial Services Problems in Internet Banking

Regression Weights	Estimate	S.E.	C.R.	P
Internet Banking <--- IB-1	0.263	0.011	23.630	0.000
Internet Banking <--- IB-2	0.249	0.011	22.084	0.000
Internet Banking <--- IB-3	0.229	0.015	15.790	0.000
Internet Banking <--- IB-4	0.228	0.015	14.931	0.000

Note: .000 is 1% α -significant level

Fig-1 Path Regression Analysis of Digital Financial Services Problems in Internet Banking

The path diagram illustrates the independent variables associated with problems in digital financial services for Internet banking, such as 'Too many options confuse me during Internet usage' (IB-1), 'Reluctance to use digital banking services due to a lack of security' (IB-2), 'Internet banking activities sometimes hang' (IB-3), and 'Frequent Internet connectivity issues and poor Internet speed' (IB-4). Path regression analysis was applied to all four variables, and each was found to be highly significant at the 1% significance level.

Comparing the significant variables with their estimated values, the most influential problem in digital financial services for Internet banking is 'Too many options confuse me during Internet usage' (IB-1) with an estimate value of 0.263. The second most influential variable is 'Reluctance to use digital banking services due to a lack of security' (IB-2) with an estimate value of 0.249. The third influential variable is 'Internet banking activities sometimes hang' (IB-3) with an estimate value of 0.229. The study concludes that the primary issues in digital financial services for Internet banking are the confusion caused by too many options and the reluctance to use digital banking services due to security concerns.

Table-4 Covariance for Digital Financial Services Problems in Internet Banking Variables

Covariance	Estimate	S.E.	C.R.	P
IB-1<--> IB-5	-0.063	0.040	-1.560	0.119
IB-4 <--> IB-2	-0.051	0.040	-1.280	0.201
IB-4 <--> IB-3	0.198	0.029	6.778	0.000
IB-1 <--> IB-4	-0.084	0.043	-1.986	0.047
IB-2 <--> IB-4	0.022	0.042	0.526	0.599
IB-1 <--> IB-4	0.695	0.066	10.489	0.000

The above table interprets covariance relationship of Digital Financial Services Problems in Internet Banking Variables, the significant relations are comparing with estimate values, IB-1 <--> IB-4 and IB-4 <--> IB-3 relationships are highly significant at 1% level. The estimate values are 0.695 and 0.198 respectively.

6. Findings

The findings of this study highlight significant challenges in the digital financial services sector, particularly in Internet banking. The most prominent issue is user confusion caused by an overly complex interface with too many options. Security concerns also play a major role in deterring users from fully embracing digital banking services. Technical issues, such as system hangs, and frequent connectivity problems further exacerbate the situation.

- 1. Confusion Due to Excessive Options:** The most significant challenge identified is the confusion caused by too many options available during Internet banking usage. This was represented by the variable 'Too many options confuse me during Internet usage' (IB-1) with the highest estimated value of 0.263.
- 2. Security Concerns:** The second most significant challenge is the reluctance to use digital banking services due to security concerns. This is indicated by the variable 'Reluctance to use digital banking services due to a lack of security' (IB-2) with an estimated value of 0.249.
- 3. Technical Issues:** The third significant challenge is the technical difficulties experienced during Internet banking activities, such as the system hanging, represented by the variable 'Internet banking activities sometimes hang' (IB-3) with an estimated value of 0.229.
- 4. Connectivity Problems:** Frequent Internet connectivity issues and poor Internet speed were also identified as significant challenges, although they were less influential compared to the other variables.

7. Suggestions

To address the challenges in Internet banking, financial institutions should streamline and simplify their online banking interfaces to reduce confusion and make navigation more intuitive for users. Enhancing security measures by implementing advanced security protocols, providing regular updates on security features, and educating users about safe online practices is essential to alleviate security concerns. Investing in robust IT infrastructure will improve the reliability of online banking services, minimizing instances where the system hangs or crashes. Additionally, while banks may not have direct control over Internet connectivity, they can optimize their services to perform well even with lower bandwidth and collaborate with Internet service providers to ensure better connectivity for their users.

8. Conclusion

To address these challenges, financial institutions should prioritize simplifying their user interfaces to make them more intuitive. Enhancing security measures and educating users on safe online practices can help alleviate security concerns. Investing in robust IT infrastructure will improve the reliability of online banking services, reducing technical issues. Lastly, optimizing services for better performance with lower bandwidth and collaborating with Internet service providers can help mitigate connectivity problems. By implementing these suggestions, banks can significantly improve the user experience, fostering greater trust and adoption of Internet banking. This, in turn, will contribute to the overall growth and efficiency of the digital financial services sector.

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