

A Study on Consumer Satisfaction Towards Allied Internet Banking (IB) Services in Bhopal: A Comparative Study Between Bank of India and HDFC Banks

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Abstract

Internet Banking (IB) has a significant role in the digital financial world. Allied internet banking services have gained significant importance in the contemporary banking environment as banks increasingly rely on digital platforms to deliver value-added services to consumers. These services go beyond basic online banking functions and include mobile banking applications, digital payment systems, UPI services, online loan and credit facilities, insurance and investment services, e-statements, and technology-enabled customer support. As digital financial literacy increases, the expectations of the consumers shift towards a seamless service integration. The effectiveness and quality of these allied services is crucial in shaping consumer trust, satisfaction, and continued usage of internet banking platforms.

The study investigates satisfaction of the consumers with allied IB services by examining key factors influencing consumer satisfaction, viz, security and privacy, ease of use, reliability, accessibility, responsiveness, cost effectiveness, and overall service quality. Understanding customer perceptions of these factors is essential, as increasing competition between public and private sector banks has intensified the need to deliver efficient and customer-centric digital services.

Data has been collected primarily with the help of a questionnaire, collecting data from the consumers who are the users of Allied IB Services of the banks selected. Descriptive statistics, correlation analysis, and regression analysis were employed to examine the relationship between service usage and satisfaction levels. The findings reveal a strong positive association between frequency of usage and overall satisfaction, highlighting the importance of service quality dimensions such as security and ease of use. The findings will provide useful insights to the banks to make the quality of these services better and improve the satisfaction of the consumers.

Keywords: Allied internet banking services, technology-enabled customer support, consumer satisfaction, service quality

INTRODUCTION

Banks have witnessed a revolutionary transformation with the advent of digitalization. IB has emerged as a vital delivery channel, enabling consumers to perform banking transactions conveniently without visiting physical branches. Alongside core internet banking functions, banks now offer a range of allied internet

banking services. These include mobile and email alerts, e-statements, online bill payments, customer grievance redressal portals, chatbots, security notifications, and personalized service features.

Allied internet banking services play a supportive yet strategic role in improving customer experience by enhancing convenience, responsiveness, security, and accessibility. As consumers become more digitally aware and service-sensitive, satisfaction is no longer derived solely from transaction efficiency but also from the quality and reliability of these supplementary services. While core services such as fund transfers and balance inquiries form the backbone of internet banking, allied services enhance customer convenience, engagement, and perceived value.

Review of Literature

- **Singh S. and Srivastava R.K. (2020)**, examined customer perceptions of digital banking services in India and found that supplementary features such as real-time alerts, ease of navigation, and online assistance significantly enhance customer satisfaction. The study concluded that consumers value supportive digital features that reduce effort, uncertainty, and transaction-related anxiety.
- **Kaur B. et. al (2021)**, explored factors influencing satisfaction in online banking and emphasized that value-added digital services, including personalized notifications and online problem resolution, positively affect satisfaction levels. Their findings indicate that consumers associate such services with convenience and responsiveness, which improves their overall banking experience.
- **Chaudhary V. et al. (2022)**, analysed digital banking adoption in emerging economies and reported that convenience-oriented allied services such as auto-payments, reminders, and digital documentation significantly enhance customer satisfaction. The study noted that consumers increasingly expect banks to provide seamless supplementary services that simplify financial management.
- **Alnaser F. M., et. al. (2023)**, the study focuses on disruptive technologies such as artificial intelligence (AI) have become increasingly essential in the banking sector to cater rising expectations of the customers and enhance satisfaction. In the landscape of digital banking, AI is widely implemented across various applications, including facial recognition, conversational chatbots, voice recognition systems. Although AI-enabled banking improves operational efficiency, enhances data interpretation, and enables banks to address customer queries and complex issues effectively.
- **Oksanen J. (2025)**, The findings reveal that artificial intelligence enhances customer experience when it provides task-specific support. Among young adults, AI-powered automation creates significant value in routine banking activities by reducing friction and ensuring smooth, low-effort service usage. However, in more complex or personally significant situations, consumers place greater importance on human expertise and transparency in how outcomes are generated.

Objectives of the Study

- To recognize the key allied services that influence consumer satisfaction.
- To examine the frequency of usage of Allied IB Services among consumers.
- To evaluate the benefits received while using Allied IB Services.
- To assess the level of satisfaction with Allied IB Services.
- To offer recommendations for banks to enhance allied services.

Research Methodology

The study focuses on the satisfaction of the consumers who use allied internet banking services in Bhopal,

with specific reference to HDFC Bank and Bank of India. Convenience sampling was employed to select respondents who are residents of Bhopal and active users of internet banking services. The study adopts an analytical and descriptive research design. The data has been collected using primary data obtained with the help of a questionnaire. Secondary data was obtained through journals and articles. Sample consists of 200 Allied IB users. The analysis of data and interpretation was done using pie charts and bar charts, and percentage distribution tables, correlation and regression were used for statistical analysis.

Analysis of Data

Table 1. Respondent’s Gender

Respondent’s Gender	Number of respondents	%
Female	102	51
Male	98	49
Total	200	100

The table reveals that 51% of the users are female and the remaining users (49%) are male.

Table 2. Respondent’s Age

Respondent’s Age	Number of respondents	%
18- 25	40	20
26- 35	64	32
36- 45	36	18
46-55	48	24
56- 65	12	6
Total	200	100

The age distribution table indicates that users majorly belong to the 26-35 age bracket followed by 24% users of 46-55 age group. 20% belong to the age group of 18-25, 18% to the group of 36-45 and only 6% belong to the age bracket of 56-65.

Table 3 Respondent’s Employment Status

Respondent’s Employment Status	Number of respondents	%
Private sector	105	52.5
Public sector	10	5
Self-employed	55	27.5
Student	30	15
Other	5	2.5
Total	200	100

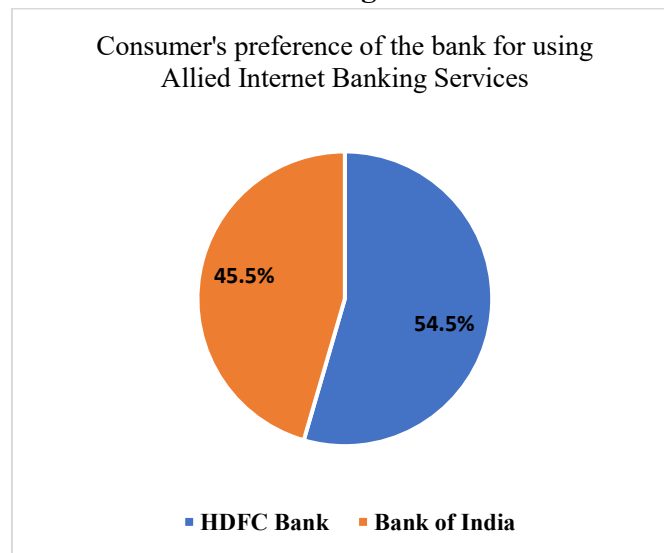
Employment status reveals that a large proportion of the users work for private sector followed by student. The least users are working for public sector, this shows that they are still not fully aware these services. Students form the second largest base to use these services. The remaining user base consists of self employed and other professions.

Table 4. Respondent’s Monthly Income

Respondent’s Monthly Income	Number of respondents	%
0,000	41	20.5
0,000 – 40,000	76	38
0,000 – 60,000	54	27
0,000 – 80,000	14	7
0,000 – 1,00,000	11	5.5
0,00,000	4	2
Total	200	100

Income distribution demonstrates that the middle income group i.e., 20,000-40,000 forms the basic user base of these services followed by the next income group of 40,000-60,000. About 20.5% of the users falls below the 20,000 income group. The rest 14.5% belongs to the income group between 60,000 to 1,00,000.

Figure 1. Preference of the bank for using Allied Internet Banking Services



The chart reveals that a larger portion of users prefer HDFC bank (54.5%) more than Bank of India (45.5%) for their transactions.

Table 5. Tenure of being the Consumer of the present bank

Years	Number of respondents	%
0	0	0
1	24	12
5	30	15
10	44	22
> 10	102	51
Total	200	100

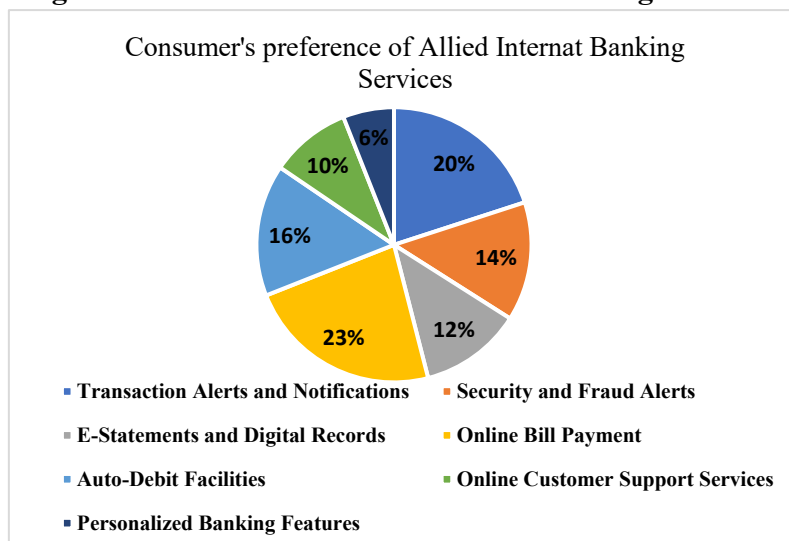
The data reveals that a large number of the respondents i.e., 51% have been the consumer of the present bank for more than 10 years.

Table 6. Frequency of allied IB usage

Frequency of usage	Number of respondents	%
Daily	40	40.5
Once a week	35	33.5
Occasionally	19	19
Rarely	7	7
Total	100	100

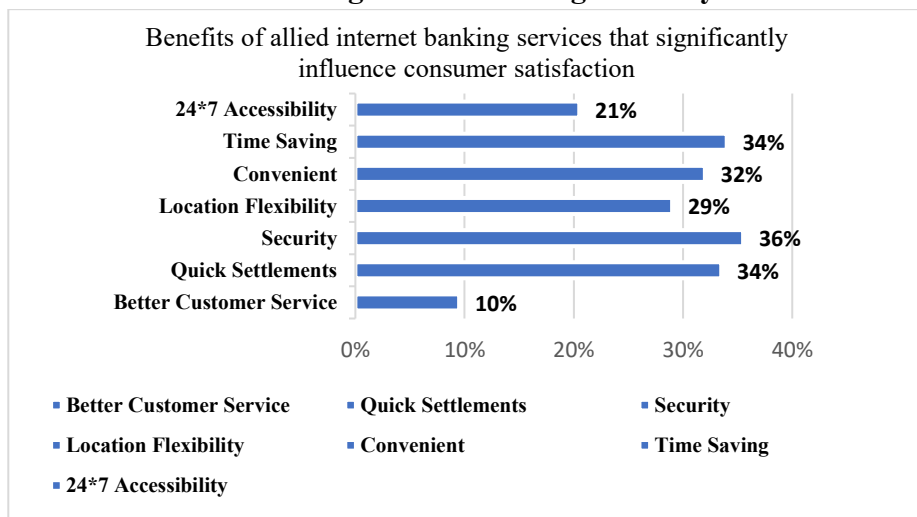
The table demonstrates that a large number of users (40.5%), use allied IB services daily followed by 33.5% users who are using the services once a week. 19% are occasional users and only 7% use the services rarely.

Figure 2. Preference of allied internet banking services



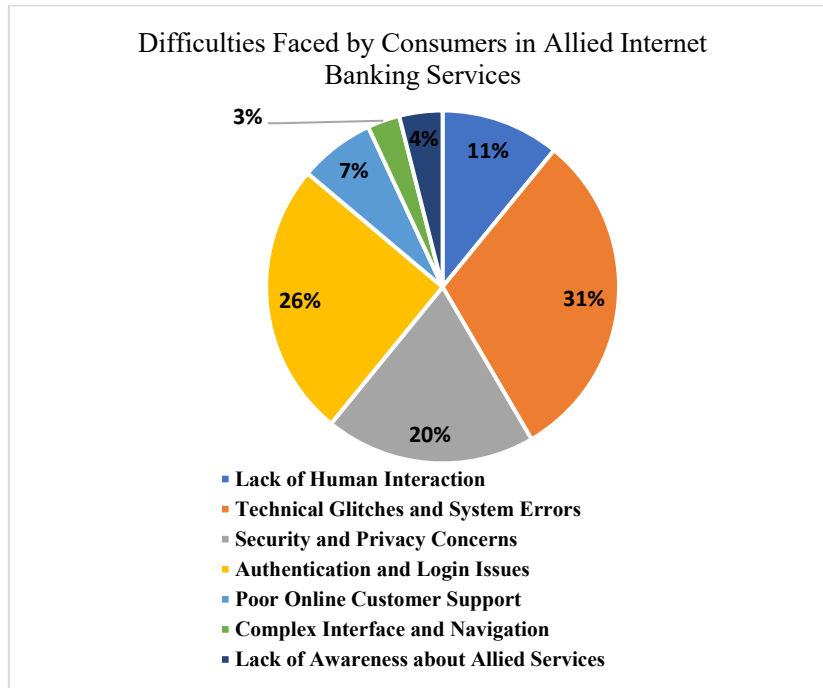
The pie chart illustrates the distribution of respondents based on their preferred allied internet banking services. Transaction alerts and notifications account for the highest share (20%), followed by security and fraud alerts (14%). E-statements (12%) and highest used allied internet banking services is the online bill payment services (23%) also contribute significantly to consumer satisfaction. Personalized banking features show the lowest share (6%), suggesting limited awareness or usage among respondents.

Figure 3. Benefits of allied internet banking services that significantly influence consumer satisfaction



The chart illustrates the distribution of respondents based on the benefits they get while using allied IB services. Most of the users feel that the allied services are secure. 34% of the respondents find the allied services time saving and the settlements are quick. 32% users feel that the services are convenient. 29% respondents enjoy location flexibility of the services. 21% enjoys 24*7 accessibility and 10% feel that the customer services associated with their bank is better.

Figure 4. Difficulties a consumer faced while using Allied IB Services



The pie chart illustrates the distribution of respondents based on the difficulties faced during the use of allied services. Technical glitches and system errors account for the highest share (31%), followed by Authentication and login issues (26%). Security and Privacy concerns (20%) Lack of Human Interaction (11%) also affects consumer satisfaction significantly. Complex Interface and Navigation (3%), Lack of Awareness about Allied services (4%) and Poor Online Customer Support accounts for 7%.

Table 7. Descriptive Statistics of Perceived Service Quality Items

Sr. No.	Perceived Service Quality Statement	Mean	Std. Deviation
1	Allied internet banking services are easy to use	4.40	0.49
2	The services are reliable and work smoothly without frequent errors	4.00	0.63
3	Personal and financial information is secure while using allied services	4.40	0.49
4	The services are accessible anytime and from anywhere	4.20	0.40
5	The response time of allied internet banking services is satisfactory	3.70	0.46

6	The charges associated with allied internet banking services are reasonable	3.40	0.49
7	Online customer support related to allied services is helpful and responsive	3.70	0.64
8	Chatbots or digital assistance tools provide useful guidance when needed	3.30	0.64

The results indicate that ease of use and security emerged as the strongest dimensions, each recording the highest mean score (M = 4.40), followed by accessibility (M = 4.20). Reliability also received a favorable evaluation (M = 4.00). In contrast, response time and online customer support showed moderate mean values (M = 3.70), indicating scope for improvement. The lowest mean score was observed for chatbots and digital assistance tools (M = 3.30), suggesting comparatively lower effectiveness of AI-based support services. Overall, the findings suggest that while core service quality attributes are positively perceived, technology-enabled support and cost-related aspects require further enhancement.

Table 1.8 Satisfaction towards Allied Internet Banking Services

Satisfaction	Number of respondents	%
Very Satisfied	16	16%
Satisfied	485	48.5%
Neutral	160	16%
Dissatisfied	15	1.5%
Very Dissatisfied	0	0%
Total	1000	100%

The data reveals that 16% using allied services are very satisfied with the services. Most of the respondents are satisfied with the allied internet banking services (48.5%). 26% are neutral and the remaining 9.5% are dissatisfied with the services.

Hypothesis Testing

H0: There is no significant relationship between the frequency of allied internet banking services usage and the level of satisfaction towards allied internet banking services.

H1: There is a significant relationship between the frequency of allied internet banking services usage and the level of satisfaction towards allied internet banking services.

Correlation analysis:

	Frequency of use	Satisfaction
Frequency of use	1	
Satisfaction	0.838811	1

The correlation analysis reveals a strong and positive relationship between frequency of usage and overall satisfaction. The high correlation coefficient (r = 0.8388) indicates that an increase in the frequency of usage is associated with an increase in the level of overall satisfaction among consumers.

Regression analysis:

Regression Statistics	
Multiple R	0.83881
R Square	0.70360
Adjusted R Square	0.70210
Standard Error	0.51017
Observations	200

ANOVA					Significance F			
	df	SS	MS	F				
Regression	1	122.3392	122.3392	470.0255	3.5E-54			
Residual	198	51.53583	0.260282					
Total	199	173.875						

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	0.19179	0.104089	1.84253	0.066893	-0.39705	0.013478	-0.39705	0.013478
Satisfaction	0.92436	0.042636	21.68007	3.5E-54	0.840281	1.008441	0.840281	1.008441

The regression analysis reveals that the model is statistically significant ($F = 470.03$, $p < 0.05$). The coefficient of determination ($R^2 = 0.7036$) indicates that frequency of usage explains 70.36% of the variation in overall satisfaction. The regression coefficient for frequency of usage is positive and significant ($\beta = 0.924$, $p < 0.05$), demonstrating that higher frequency of usage leads to increased overall satisfaction. Therefore, the alternative hypothesis (H_1) is accepted.

Finding

- Allied internet banking services are widely adopted across gender groups, indicating increasing digital inclusivity.
- Middle-income, professionally active consumers constitute the primary user segment, suggesting strong linkage between economic activity and digital banking adoption.
- Online bill payment and transaction alerts are the most valued allied services, highlighting the importance of convenience
- A larger section of users prefer the services of HDFC bank to Bank of India.
- Security and ease of use emerged as the strongest determinants of perceived service quality.
- Most of the users (48.5%) are satisfied with the allied IB services.

- The results indicate that ease of use and security emerged as the strongest dimensions, each recording the highest mean score, followed by accessibility.
- Reliability also received a favourable evaluation ($M = 4.00$).
- Response time and online customer support showed moderate mean values ($M = 3.70$), indicating scope for improvement.
- The lowest mean score was observed for chatbots and digital assistance tools, suggesting comparatively lower effectiveness of AI-based support services.
- While core service quality attributes are positively perceived, technology-enabled support and cost-related aspects require further enhancement.
- The high correlation coefficient ($r = 0.8388$) indicates that an increase in the frequency of usage is associated with an increase in the level of overall satisfaction among consumers.
- The regression coefficient for frequency of usage is positive and, demonstrating that higher frequency of usage leads to increased overall satisfaction. Hence, the null hypothesis is rejected and the alternative hypothesis is accepted.

Suggestion

- Banks should focus on improving system stability and reducing technical glitches, as these were reported as the most common challenges.
- Enhanced security features and fraud alert mechanisms should be continuously upgraded to maintain customer trust.
- Banks should increase customer awareness regarding lesser-used allied services through digital campaigns.
- User interfaces of internet banking platforms should be simplified to ensure ease of navigation for all age groups.
- Banks should strengthen online customer support, combining AI-based tools with human assistance for complex issues.
- Personalized banking features should be promoted to enhance customer engagement and satisfaction.

Conclusion

The allied IB services are a significant part in enhancing the satisfaction of the consumer in the digital banking environment. Specifically, the research evaluates critical dimensions such as security and privacy, ease of use, reliability of the services, responsiveness, cost effectiveness and overall quality of the allied services. The dimensions are necessary to understand the behaviour of the consumers in a manner in which they assess the performance and dependence of allied IB services. The findings indicate a strong and positive relationship between frequency of usage and overall satisfaction, confirming that regular engagement with allied services enhances customer experience. In the scenario of increasing competition in the digital banking world between public and private sector banks, the expectations of the consumers have shifted from mere transactional convenience to comprehensive digital support services. Private sector banks were found to have a higher preference among respondents, highlighting the need for public sector banks to strengthen their digital service offerings. Despite high satisfaction levels, challenges such as technical glitches and authentication issues persist, indicating areas for improvement. Overall, the study provides valuable insights for banks to enhance allied internet banking services and foster long-term customer satisfaction.

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