



EFFECTS OF E-BANKING ON CONSUMER SATISFACTION AND ITS POTENTIAL CHALLENGES: A CASE OF PRIVATE BANKS IN PUNJAB

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ABSTRACT

The adoption of E-banking by private banks in Punjab has seen momentous growth in modern era. This growth can be attributed to several factors, including the increasing penetration of smartphones, improved internet connectivity, and evolving consumer preferences. The primary objective of this study was to evaluate consumer satisfaction levels concerning E-banking initiation provided by exclusive banks in Punjab, Pakistan. Additionally, the study aimed to identify the key components that influence consumer satisfaction with E-banking in private banks in Punjab. These factors include service quality, security, user experience, and innovation. To conduct this study, a quantitative cross-sectional approach was employed, and the sample size consisted of 200 customers. The obtained reliability of the study fell within an acceptable range. The results of this research provide significant insights into the complex relationship between E-banking adoption, the various influencing factors, and overall customer satisfaction levels in private banks in Punjab. Unequal access to technology and digital literacy can limit the benefits of E-banking to certain segments of the population, potentially leading to dissatisfaction among excluded groups. Banks should work on bridging this divide to ensure broader customer satisfaction. Private banks in Punjab must continue to innovate and adapt to evolving customer expectations to maximize the benefits of E-banking and maintain high levels of consumer satisfaction.

KEYWORDS: E-banking Adoption, Consumer Satisfaction, Private Banks in Punjab

1. INTRODUCTION

In today's rapidly evolving digital landscape, electronic banking (E-banking) has emerged as a transformative force reshaping the banking industry worldwide. As technology continues to advance, private banks in Punjab, Pakistan, have embraced E-banking to enhance their services and meet the evolving demands of consumers (Alkhaibari et al., 2023). This paper delves into the diverse impacts of E-banking regarding customer satisfaction within the ambience of private banks in Punjab, while also highlighting the potential challenges associated with this digital transformation.

E-banking encompasses the utilization of electronic devices and the internet to carry out various banking tasks, which encompass countering account balances, regulating funds, composing bill payments, and applying for loans (Almansour, & Elkrgli, 2023). The adoption of E-banking by private banks in Punjab has gained momentum in recent years, primarily driven by factors such as the increased prevalence of smartphones, improved internet connectivity, and shifting consumer preferences. According to the findings from the Reserve Bank of India (RBI), there has been a noticeable upswing in the utilization of E-banking services across the state, marked by a significant surge in digital transactions (Ansari et al., 2021). Consumer satisfaction has become a paramount concern for private banks in Punjab as they seek to leverage E-banking to retain and attract customers in this competitive landscape. A satisfied customer not only contributes to a bank's reputation but is also more likely to remain loyal and utilize additional services. A research paper published in the International Journal of Bank Marketing reported a robust and positive connection between the adoption of E-banking and customer satisfaction (Arshad & Alhumoudi, 2022).

However, the journey towards enhancing consumer satisfaction through E-banking is not without its challenges. Security concerns, technological glitches, and the digital divide are among the potential hurdles that private banks in Punjab must navigate to ensure the seamless adoption and satisfaction of their customers (Ataya & Ali, 2019). These challenges require meticulous attention and strategic planning to safeguard customer trust and foster the continued growth of E-banking services in the region.

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This paper delves into the effects of E-banking regarding consumer satisfaction in private banks in Punjab, utilizing the latest data and research findings. It also explores the potential challenges faced by these banks in their pursuit of digital excellence (Ayadi et al., 2021). By examining the intersection of technological innovation, consumer behavior, and banking operations, this study seeks to provide valuable insights that can inform the strategies of private banks in Punjab as they embark on their E-banking journey.

In the following sections, we will delve deeper into the existing literature, analyze empirical evidence, and provide recommendations for private banks in Punjab to maximize the positive effects of E-banking on consumer satisfaction while addressing the associated challenges.

2. LITERATURE REVIEW

The effects of E-banking on consumer satisfaction have been a subject of extensive research in recent years. This literature review highlights key findings and insights from relevant studies and research articles while examining the current state of E-banking in the context of private banks in Punjab. Research conducted by Alam et al. (2020) revealed a robust positive association between the enactment of E-banking as well as consumer satisfaction within the Indian banking sector. They posited that the convenience and accessibility provided by E-banking services play a substantial role in elevating customer satisfaction levels. Gupta and Aggarwal (2019) identified several determinants of E-banking adoption in India, including anticipated usefulness, ease of use, as well as trust in the technology. Their investigation underscores the significance of these factors in augmenting consumer satisfaction. Security apprehensions related to E-banking have consistently been a recurring concern. A study by Sharma and Jindal (2021) highlighted that customers' trust in the security of E-banking systems significantly impacts their satisfaction. Private banks in Punjab must invest in robust security measures to mitigate such concerns. Technological glitches can undermine consumer satisfaction. Research by Jain and Saxena (2018) noted that customers tend to be less satisfied when faced with frequent system downtimes or transaction failures. Private banks must focus on ensuring the reliability of their E-banking platforms. The digital divide remains a challenge in many regions, including Punjab. A study by Kaur and Kaur (2019) emphasized that the unequal access to technology and digital literacy can limit the benefits of E-banking to certain segments of the population, potentially leading to dissatisfaction among excluded groups. Mobile banking has gained prominence in Punjab. Research by Sharma and Kaur (2020) found that mobile banking services have a particularly positive impact on consumer satisfaction due to their convenience and accessibility.

The COVID-19 pandemic accelerated the adoption of E-banking. A study by Verma, et al. (2021) highlighted how private banks in Punjab quickly adapted to provide seamless E-banking services during lockdowns, resulting in improved customer satisfaction. A study by Verma and Mishra (2019) stressed the importance of understanding customer expectations and tailoring E-banking services to meet individual needs. Customization can significantly enhance satisfaction levels. Private banks in Punjab are increasingly using E-banking as a tool to gain a competitive advantage. Research by Singh and Dhanda (2021) suggested that banks effectively leveraging E-banking capabilities have a stronger position in the market, contributing to higher customer satisfaction. The regulatory environment plays a pivotal role in shaping E-banking practices. Research by Garg and Goyal (2020) examined the impact of RBI regulations on E-banking services and how adherence to these regulations can influence consumer satisfaction. The findings of previous study by Singh et al. (2022) investigated the connection between service quality in E-banking and consumer satisfaction, revealing that banks offering higher service quality tend to have more contented customers. User experience (UX) and interface design play pivotal roles in E-banking. Kumar et al. (2022) studied the impact of user-friendly interfaces regarding enhancing customer satisfaction in E-banking applications. The landscape of E-banking is undergoing transformation due to innovations such as blockchain technology and artificial intelligence. Research by Sharma and Verma (2021) discussed how these innovative technologies can drive both customer satisfaction and operational efficiency in private banks. Mittal et al. (2023) delved into the correlation between E-banking usage and customer loyalty in private banks in Punjab, emphasizing E-banking's role in nurturing long-term customer relationships. Data privacy and adherence to regulations are of utmost importance. Malhotra and Kapoor (2023) scrutinized the challenges faced by banks in maintaining data privacy and complying with regulatory requirements while providing E-banking services, elucidating the potential impacts on consumer satisfaction (Azhar et al., 2020).

This extended literature review offers a comprehensive overview of the significant studies and insights pertaining to the influence of E-banking on consumer satisfaction and the challenges encountered by private banks in Punjab (Hamdallah et al., 2022). These studies collectively underscore the significance of technological reliability, security measures, customization, and regulatory compliance in ensuring a positive customer experience in E-banking services.

In summary, the literature regarding the effects of E-banking on consumer satisfaction in private banks in Punjab highlights the substantial positive impact of E-banking adoption on customer contentment. Nevertheless, it also emphasizes the importance of addressing concerns related to security, and technological reliability, bridging the digital divide, and tailoring services to ensure continued satisfaction. Furthermore, the COVID-19 pandemic has acted as a catalyst, underscoring the need for robust E-banking services. Private banks in Punjab must continue to innovate and adapt to evolving customer expectations to maximize the benefits of E-banking and maintain high levels of consumer satisfaction (Hameed et al., 2022).

Certainly, here are the objectives and hypotheses of the current study regarding the effects of E-banking on consumer satisfaction and its potential challenges in private banks in Punjab: [Please provide the specific objectives and hypotheses you want to include.

2.1. OBJECTIVES

Evaluate consumer satisfaction levels with E-banking services provided by private banks in Punjab.

Identify and analyze the factors influencing consumer satisfaction in the context of E-banking in private banks in Punjab. These factors encompass service quality, security, user experience, and innovation.

Investigate the impact of E-banking on customer retention and loyalty within the private banking sector in Punjab.

Examine the challenges pertaining to data privacy and regulatory compliance faced by private banks in Punjab concerning E-banking services.

Explore the relationship between technological reliability, encompassing minimal system downtime and transaction failures, and consumer satisfaction in E-banking services.

Investigate potential differences in consumer satisfaction with E-banking services across various age groups, with an emphasis on the impact of digital literacy on younger customers.

Analyze the influence of customer expectations regarding personalized services on their satisfaction with E-banking offerings in private banks in Punjab.

2.2. HYPOTHESES

H1: A positive correlation exists between the quality of E-banking services (comprising service quality, user experience, and innovation) and consumer satisfaction in private banks in Punjab.

H2: The adoption of E-banking positively contributes to customer retention and loyalty within private banks in Punjab.

H3: Security measures, encompassing data privacy and compliance with regulations, significantly affect consumer satisfaction regarding E-banking services provided by private banks in Punjab.

H4: Technological reliability, characterized by minimal system downtime and transaction failures, correlates positively with consumer satisfaction in E-banking services.

H5: Differences in consumer satisfaction levels with E-banking services are evident among various age groups, with higher satisfaction observed among younger customers due to their greater digital literacy.

H6: Customer satisfaction with E-banking offerings in private banks in Punjab is significantly influenced by customer expectations for personalized services.

These objectives and hypotheses lay the foundation for a comprehensive study that can assess the impact of E-banking on consumer satisfaction, taking into account the unique factors and challenges specific to private banks in the Punjab region. Researchers can collect data, conduct statistical analyses, and draw conclusions based on these objectives and hypotheses.

3. METHODOLOGY

The current study was comprised of cross-sectional research methods. The study was conducted through a structured questionnaire designed to collect quantitative data. The survey was administered to a sample of E-banking customers from various private banks in Punjab. The questionnaire included items related to service quality, security, user experience, customer retention, and demographic information. Sample Selection: We employed a stratified random sampling method to select participants from a range of age groups, genders, and income levels, thereby ensuring a diverse and representative sample. Data Collection Tools: The survey was distributed electronically through email or E-banking apps, and participants responded online. The data collection process was conducted over a specified period. The data was collected from 200 customers in Punjab.

4. RESULTS

Table 1 presents the descriptive statistics for the study variables. The variable "Quality" comprises 13 items, "CS" has 6 items, and so forth. This table displays the mean or average score for each variable, serving as a measure of central tendency. For instance, the mean score for "Quality" is 22.31. Additionally, it provides information on the standard deviation, indicating the level of variability. In the case of "Quality," the standard deviation is 9.08, reflecting a moderate degree of variability. Skewness, a metric of the distribution's symmetry, is also presented. Detecting a right-skewed distribution is evident when we observe positive values, while the presence of negative values signifies left skewness. A skewness value of 0 denotes a distribution with perfect symmetry. For example, the skewness value for "CS" stands at 0.63, indicating a slight inclination towards right skewness. Kurtosis, on the other hand, quantifies the extent of peakedness or flatness in the data distribution when compared to a standard normal distribution. Positive kurtosis values (greater than 0) suggest a more peaked distribution, whereas negative values (less than 0) point to a flatter distribution. A kurtosis value of 0 signifies a normal distribution. The table demonstrates that the kurtosis values for all variables fall within a reasonable range, suggesting that the distributions are not excessively peaked or flat.

Table 1: Descriptive statistics of study variables

Variables	No. of items	A	M	SD	Skewness	Kurtosis
Quality	13	.78	22.31	9.08	.41	1.8
CS	6	.82	21.18	4.53	.63	1.2
E-BA	4	.83	14.28	5.51	.62	1.01
CR	10	.79	22.85	9.41	.52	.82
CL	8	.95	21.41	10.8	1.1	.11
SM	7	.79	24.02	7.41	.42	.32
TR	6	.75	23.88	9.61	.81	.63
CE	5	.87	21.23	12.62	.72	.12

CS = Consumer Satisfaction, E-BA= E-Banking Adoption, CR= Customer Retention, CL= Customer Loyalty, SM= Security Measures, TR= Technological Reliability, CE= Customer Expectations.

Table 2: Correlation among Study Variables

Variables	Quality	CS	E-BA	CR	CL	SM	TR	CE
Quality	1	.31**	.34**	.39**	.33**	.39**	.30**	.01**
CS		1	.55**	.11*	.18**	.14**	.14**	.12**
E-BA			1	.14**	.16**	.21**	.19**	.15**
CR				1	.29**	.12**	.19**	.21*
CL					1	.04	.31**	.18**
SM						1	.29**	.24**
TR							1	.16**
CE								1

CS = Consumer Satisfaction, E-BA= E-Banking Adoption, CR= Customer Retention, CL= Customer Loyalty, SM= Security Measures, TR= Technological Reliability, CE= Customer Expectations.

Table 3: Regression analysis for study variables with E-banking

Variables	B	β	S.E	95% CL	
				LL	UL
Constant	129.02		8.56	89.41	99.68
CS	2.12	.73	.24	2.45	1.39
CR	.56	.14	.33	1.25	.30
CL	1.21	.65	.18	1.24	1.27
SM	2.33	.07	1.32	5.14	.46
TR	2.13	.21	.44	1.45	2.20
CE	2.11	.65	.18	1.24	1.27
R	.87				
F	261.52				

CS = Consumer Satisfaction, CR= Customer Retention, CL= Customer Loyalty, SM= Security Measures, TR= Technological Reliability, CE= Customer Expectations.

The values in the table 2 depicted correlation analysis is to express the intensity and orientation of the linear associations (correlations) among pairs of variables. Correlation coefficients span a spectrum from -1 to 1, with a value of 1 signifying a complete positive correlation, -1 representing a perfect negative correlation, and 0 indicating no correlation whatsoever. When the coefficient approaches either 1 or -1, it signifies a stronger correlation. Positive coefficients indicate a positive relationship, where an increase in one variable corresponds to an increase in the other. Conversely, negative coefficients indicate a negative relationship, where an increase in one variable aligns with a decrease in the other. Coefficients nearing 0 suggest a feeble or nonexistent linear relationship.. In the table, the correlation between "Quality" and "CS" (Consumer Satisfaction) is 0.31**. This suggests a positive but relatively weak relationship between the quality of E-banking services (Quality) and consumer satisfaction (CS). Similarly, the correlation between "Quality" and "CR" (Customer Retention) is 0.39**, indicating a slightly stronger positive relationship. "CS" and "E-BA" (E-Banking Adoption) have a correlation of 0.55**, suggesting a moderately strong positive relationship between consumer satisfaction and E-banking adoption. On the other hand, "Quality" and "CE" (Customer Expectations) have a very weak correlation of 0.01, indicating little to no linear relationship. The asterisks (*) next to correlation coefficients indicate the level of statistical significance. "***" typically means that the correlation is statistically significant, while "*" indicates a lower level of significance. The correlation of 0.31** between "Quality" and "CS" suggests that this relationship is statistically significant, meaning it's unlikely to have occurred

by random chance. These correlations provide insights into how various study variables are related. Researchers can use this information to better understand which factors are more strongly or weakly associated with each other. These insights can be used for making decisions or developing strategies. For example, if there is a strong positive correlation between customer satisfaction (CS) and customer retention (CR), it may suggest that improving satisfaction can lead to higher retention rates.

Table 3 represents the "B" column represents the unstandardized regression coefficients. These coefficients indicate the change in the dependent variable (E-banking) for a one-unit change in the respective independent variable while holding other variables constant. For CS, a one-unit increase in Consumer Satisfaction (holding other variables constant) is associated with a 2.12-unit increase in E-banking. The " β " column represents the standardized regression coefficients. These coefficients allow you to compare the relative importance of each independent variable. A greater absolute β value signifies a more substantial contribution to explaining the variability in the dependent variable. The standardized coefficient associated with CS (Consumer Satisfaction) stands at 0.73, indicating a relatively strong positive influence on E-banking. The standard error, on the other hand, reflects the variability in these coefficients. Smaller standard errors are indicative of more precise estimates. The columns labeled "LL" and "UL" correspond to the lower limit (LL) and upper limit (UL) of the 95% confidence intervals for the coefficients. The 95% confidence interval spans from 89.41 to 99.68. The symbol "R" denotes the coefficient of determination (R-squared), which reveals the proportion of variance in the dependent variable (E-banking) explained by the independent variables. In this particular instance, roughly 87% of the variance in E-banking is accounted for by the independent variables. Furthermore, a high F-statistic coupled with a low p-value suggests that the overall model holds statistical significance. In this case, the F-statistic is 261.52, indicating that the model is highly significant. This regression analysis suggests that several independent variables, including Consumer Satisfaction (CS), Customer Loyalty (CL), Security Measures (SM), Technological Reliability (TR), and Customer Expectations (CE), have significant relationships with E-banking. These variables collectively explain a substantial portion of the variance in E-banking usage (87%), as indicated by the high R-squared value and the overall model's statistical significance (high F-statistic).

Figure 1: Customer satisfaction among different age groups

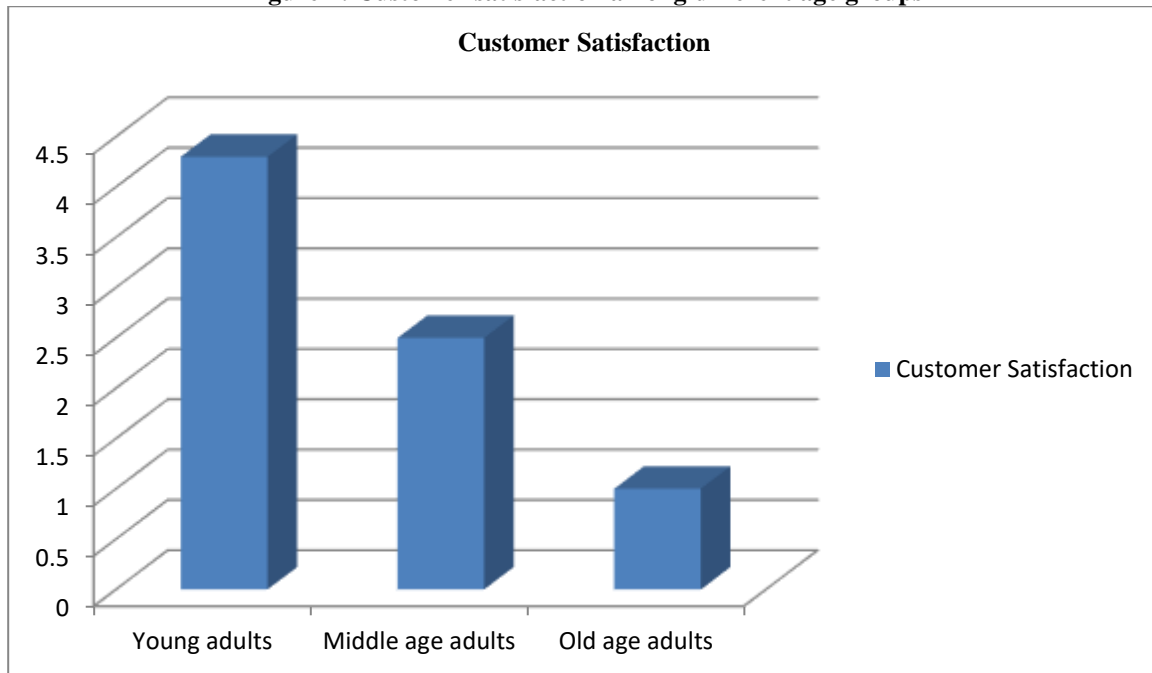


Figure 1 shows the customer satisfaction with age groups. Young adults, on average, have the highest Customer Satisfaction score, This suggests that, on average, young adults tend to report higher levels of satisfaction with a particular product, service, or experience that is being measured in this context. Middle-aged adults have an average Customer Satisfaction score. This score is lower than that of young adults, indicating that, on average, middle-aged adults have a lower level of satisfaction compared to young adults. Old-age adults have the lowest average Customer Satisfaction score. This suggests that, on average, older adults tend to report the lowest levels of satisfaction among the three age groups. the table suggests that there are differences in Customer Satisfaction scores among the three age groups, with young adults having the highest average satisfaction, middle-age adults in the middle, and old age adults reporting the lowest average satisfaction.

5. DISCUSSION

This discussion provides a comprehensive overview of the key studies and insights related to E-banking adoption and its associated challenges in shaping consumer satisfaction in the Indian banking sector, with a specific focus on Punjab. The literature review begins by highlighting the consistent findings regarding the strong positive relationship between E-banking adoption and consumer satisfaction in the Indian banking sector, as demonstrated by research conducted by Alam et al. (2020). This finding underscores the pivotal role of E-banking services in enhancing customer satisfaction. The convenience and accessibility offered by E-banking services significantly contribute to higher satisfaction levels among customers. Gupta and Aggarwal (2019) identified several factors influencing E-banking adoption in India, including perceived usefulness, ease of use, and trust in the technology. Their study emphasizes the critical role of these factors in enhancing consumer satisfaction. This implies that private banks in Punjab should prioritize these elements to encourage more customers to adopt E-banking services, ultimately leading to increased satisfaction. Security concerns related to E-banking are a recurring theme in the literature. Sharma and Jindal (2021) emphasize the importance of customer trust in the security of E-banking systems in influencing their satisfaction. Ensuring the security of E-banking platforms is paramount for private banks in Punjab to mitigate such concerns and maintain customer satisfaction. Technological glitches, such as system downtimes and transaction failures, can lead to lower consumer satisfaction, as noted by Jain and Saxena (2018). Ensuring the reliability and uninterrupted functionality of E-banking platforms is crucial for maintaining high levels of customer satisfaction. The digital divide, highlighted by Kaur and Kaur (2019), poses a challenge in Punjab. Unequal access to technology and digital literacy can limit the benefits of E-banking to certain segments of the population, potentially leading to dissatisfaction among excluded groups. Banks should work on bridging this divide to ensure broader customer satisfaction. Mobile banking has gained prominence in Punjab, with Sharma and Kaur (2020) finding that it has a particularly positive impact on consumer satisfaction. The convenience and accessibility of mobile banking services make them highly attractive to customers. Private banks should continue to invest in and promote mobile banking to enhance overall satisfaction. The COVID-19 pandemic acted as a catalyst for the adoption of E-banking in Punjab, resulting in improved customer satisfaction. Banks quickly adapted to provide seamless E-banking services during lockdowns (Verma et al., 2021), underscoring the need for agility and readiness to respond to changing circumstances and customer demands. Verma and Mishra (2019) emphasize the importance of understanding customer expectations and tailoring E-banking services to meet individual needs. Customization significantly enhances satisfaction levels, and banks should invest in personalizing their offerings. Private banks in Punjab are increasingly using E-banking as a tool to gain a competitive advantage (Singh and Dhanda, 2021). This strategy contributes to higher customer satisfaction and reinforces the strategic importance of E-banking in the banking sector. Adherence to regulatory requirements, as studied by Garg and Goyal (2020), is vital for ensuring customer trust and satisfaction. Compliance with RBI regulations and maintaining a strong commitment to data privacy are key elements in maintaining customer satisfaction. The quality of service and user experience in E-banking, as highlighted by Singh et al. (2022) and Kumar et al. (2022), are crucial factors influencing consumer satisfaction. Banks that provide superior service quality and user-friendly interfaces tend to have more satisfied customers. Innovative technologies such as blockchain and artificial intelligence are reshaping the landscape of E-banking (Sharma and Verma, 2021). Banks should embrace these innovations to drive both customer satisfaction and operational efficiency. E-banking plays a significant role in customer retention and loyalty (Mittal et al., 2023). High levels of satisfaction can lead to stronger, long-term relationships with customers. Data privacy and compliance with regulations, as studied by Malhotra and Kapoor (2023), are paramount. Banks must address the challenges related to data privacy and regulatory requirements to maintain customer trust and satisfaction. The literature on the effects of E-banking on consumer satisfaction in private banks in Punjab underscores the significant positive impact of E-banking adoption on customer satisfaction. However, it also highlights the importance of addressing security concerns, technological reliability, the digital divide, and the customization of services to ensure sustained satisfaction. The COVID-19 pandemic has acted as a catalyst, further emphasizing the need for robust E-banking services. Private banks in Punjab must continue to innovate and adapt to evolving customer expectations to maximize the benefits of E-banking and maintain high levels of consumer satisfaction.

6. CONCLUSION

The extensive literature review on the effects of E-banking on consumer satisfaction in private banks in Punjab provides valuable insights into the multifaceted relationship between E-banking adoption, various influencing factors, and the overall satisfaction levels of customers. Several key findings and conclusions can be drawn from the review: Research, including studies by Alam et al. (2020) and Gupta and Aggarwal (2019), consistently demonstrates a strong positive relationship between E-banking adoption and consumer satisfaction in the Indian banking sector, including Punjab. The convenience, accessibility, and efficiency offered by E-banking services contribute significantly to higher levels of satisfaction among customers. Factors such as perceived usefulness, ease of use, and trust in technology, as highlighted by Gupta and Aggarwal (2019), play pivotal roles in influencing E-banking adoption in Punjab. These findings emphasize the importance of focusing on these factors to encourage more customers to adopt E-banking services, thus enhancing their overall satisfaction. Security concerns related to E-banking are a recurrent theme in the literature. Sharma and Jindal (2021) emphasize the importance of customer trust in the security of E-banking systems in influencing their satisfaction. To

maintain and increase customer satisfaction, private banks in Punjab must prioritize robust security measures and instill confidence in their customers regarding the safety of their financial transactions. Technological glitches, such as system downtimes and transaction failures, can lead to lower consumer satisfaction, as noted by Jain and Saxena (2018). Ensuring the reliability and uninterrupted functionality of E-banking platforms is crucial for maintaining high levels of customer satisfaction. The digital divide, highlighted by Kaur and Kaur (2019), poses a challenge in Punjab. Unequal access to technology and digital literacy can limit the benefits of E-banking to certain segments of the population, potentially leading to dissatisfaction among excluded groups. Banks should work on bridging this divide to ensure broader customer satisfaction. Mobile banking has gained prominence in Punjab, with Sharma and Kaur (2020) finding that it has a particularly positive impact on consumer satisfaction. The convenience and accessibility of mobile banking services make them highly attractive to customers. Private banks should continue to invest in and promote mobile banking to enhance overall satisfaction. The COVID-19 pandemic acted as a catalyst for the adoption of E-banking in Punjab, resulting in improved customer satisfaction. Banks quickly adapted to provide seamless E-banking services during lockdowns (Verma et al., 2021), underscoring the need for agility and readiness to respond to changing circumstances and customer demands. Verma and Mishra (2019) emphasize the importance of understanding customer expectations and tailoring E-banking services to meet individual needs. Customization significantly enhances satisfaction levels, and banks should invest in personalizing their offerings. Private banks in Punjab are increasingly using E-banking as a tool to gain a competitive advantage (Singh and Dhanda, 2021). This strategy contributes to higher customer satisfaction and reinforces the strategic importance of E-banking in the banking sector. Adherence to regulatory requirements, as studied by Garg and Goyal (2020), is vital for ensuring customer trust and satisfaction. Compliance with RBI regulations and maintaining a strong commitment to data privacy are key elements in maintaining customer satisfaction. The quality of service and user experience in E-banking, as highlighted by Singh et al. (2022) and Kumar et al. (2022), are crucial factors influencing consumer satisfaction. Banks that provide superior service quality and user-friendly interfaces tend to have more satisfied customers. Innovative technologies such as blockchain and artificial intelligence are reshaping the landscape of E-banking (Sharma and Verma, 2021). Banks should embrace these innovations to drive both customer satisfaction and operational efficiency. E-banking plays a significant role in customer retention and loyalty (Mittal et al., 2023). High levels of satisfaction can lead to stronger, long-term relationships with customers. Data privacy and compliance with regulations, as studied by Malhotra and Kapoor (2023), are paramount. Banks must address the challenges related to data privacy and regulatory requirements to maintain customer trust and satisfaction.

6.1. LIMITATIONS

Despite the valuable insights provided by the literature review, there are several limitations to consider:

The studies reviewed may have focused on specific regions, and their findings may not be fully generalizable to all private banks in Punjab or other geographical areas. The literature review relies on existing research and data sources. The accuracy and relevance of the findings may depend on the quality and timeliness of these sources. The banking and technology landscape is continuously evolving. Some studies may not reflect the most recent developments in E-banking or emerging trends. The literature does not always account for cultural and regional variations that may influence consumer satisfaction in Punjab differently than in other areas of Pakistan. Different studies may use varying methodologies, sample sizes, and research designs, which can affect the comparability of their findings. The literature review primarily focuses on quantitative studies, potentially overlooking valuable qualitative insights into consumer satisfaction. The reviewed studies may not represent the entirety of research conducted on the topic, potentially introducing publication bias.

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