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COMPARATIVE STUDY ON CUSTOMER EXPERIENCE IN DIGITAL BANKING AND PHYSICAL BANKING IN SRI LANKA: A SPECIAL REFERENCE TO SRI LANKAN COMMERCIAL BANKS

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Abstract

With the increasing adoption of digital banking in Sri Lanka, the convenience and accessibility of online platforms have transformed how customers manage their financial activities. However, customer experiences across digital banking channels may vary considerably from those in traditional, physical bank branches. This study aims to explore the customer experience within Sri Lankan commercial banks, focusing on both digital and physical banking channels. The key research problem involves understanding customer performances and expectations while evaluating the effectiveness of these banking channels. This research seeks to provide actionable insights for the improvement of service delivery. The study specifically investigates customer experiences in terms of perceived ease of use, efficiency, control, and security, while considering the consistency of service quality and the emotional responses of the customers. The primary objectives are to compare the customer experience in digital verses physical banking channels, and to assess the influence of demographic factors, such as age, gender, income, marital status, province, and employment sector, on the choice of banking channels. A comparative quantitative analysis was conducted, utilizing demographic factors and customer variables drawn from existing literature. Two models were developed to analyse customer preferences: one for digital banking and one for physical branch banking, with outcomes categorized as 'indifferent', 'prefer digital', or 'prefer both'. The hypotheses were tested using probit regression analysis. The findings revealed that level of education significantly affects the performance for digital banking, with perceived control and security being critical factors influencing digital banking experiences. For physical bank branches, customer age, education level, and income were found to be significant predictors of preference. Based on the analysis, this study provides policy recommendations aimed at enhancing customer experience and satisfaction in Sri Lanka commercial banks by aligning service delivery with customer expectations across both banking platforms.

Keywords: Customer Experience, Customer Satisfaction, Digital Banking, Demographic Factors Physical Banking

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1. INTRODUCTION

1.1 Background of the Study

Digitalization in banking has been a topic of interest for decades and remains relevant, especially with the rise of digital banking platforms. Major study areas globally include digital banking adoption, customer satisfaction, and factors influencing digital banking. However, research on these topics in Sri Lanka remains limited, particularly in customer experience across multiple banking channels. A review by Chauhan, Akhtar, and Gupta (2022) highlighted that while customer experiences with digital banking have been well-researched, studies in Sri Lanka, particularly comparing digital and physical banking, where absent from their selection of 88 global articles. This indicates a gap in Sri Lankan research, which this study aims to address.

In Sri Lanka, customer experience in banking has the potential to extend beyond digital banking. The question arises whether customers experience similar levels of satisfaction across different banking channels- digital and physical. Given Sri Lanka's ongoing technological development and varying levels of digital literacy, it is crucial to compare customer experiences between these two major channels: digital banking and physical bank branches. The global banking industry is rapidly evolving, with multiple channels available for customer interaction, including ATMs, phone banking, mobile banking, and digital wallets. Despite these advancements, Sri Lankan customers have been slower to shift entirely to digital banking. Banks in Sri Lanka need to ensure that customer service is consistent across all channels to meet customer expectations, increase satisfaction, and remain competitive.

In Sri Lanka, digital banking adoption is still a work in progress, with varying degrees of technology acceptance and digital literacy. As banks interact with customers through multiple channels such as physical branches, ATMs, and phone banking, understanding how customer experiences differ across these platforms is crucial. While global studies have largely focused on digital banking, Sri Lankan banks must ensure that they offer consistent, high-quality service across all channels, not just digital platforms. Customer preferences vary significantly. While some customers may prefer the speed and convenience of mobile banking, others value the personal interaction offered by physical branches. Understanding the customer experience across these diverse channels can provide banks with valuable insights to optimize their service offerings. This study focuses on customer satisfaction and behaviour across Sri Lanka's digital and physical banking channels, considering demographic factors such as age, income, education, and location, which can influence preferences.

The importance of understanding customer preferences and expectations across various channels cannot be overstated. By analysing customer behaviour, banks can make more informed investment decisions and optimize their services to improve customer satisfaction and loyalty. Digital banking channels may be suitable for quick, simple transactions, while physical branches offer personalized in-depth service for more complex needs. By integrating these channels and providing a seamless

customer experience, banks can increase customer loyalty, reduce operational costs, and improve overall efficiency.

Although digital banking is expanding in Sri Lanka, it has not yet reached the same level of penetration seen in other countries. According to the Central Bank of Sri Lanka's Payment Bulletin (2023), mobile banking adoption is increasing, driven by government initiatives and affordable smartphones. However, the use of internet banking remains low due to limited digital literacy and unreliable internet connections in some areas.

Sri Lankan banks are still heavily reliant on physical branches, particularly in rural areas. While there is a growing trend toward digital banking particularly among younger, urban populations, physical branches remain vital for older and rural customers. These customers often require in-person consultations for more complex transactions or financial advice, highlighting the need for a balanced approach to customer service. The study also considers how demographic factors, such as age, gender, location, education level, and socio-economic status, affect customer performances and satisfaction with different banking channels.

Emerging banking channels, such as AI- powered chatbots, social media banking, and voice banking, are still uncommon in Sri Lanka, further emphasizing the need for a comprehensive comparison between traditional and digital channels. Balancing these channels is crucial as customer preferences evolve. For instance, customers may start a transaction online but require assistance from a branch for completion. This hybrid approach calls for a seamless, integrated banking experience that aligns with the diverse needs of Sri Lanka's population.

The research problem of the study is how customer experiences and satisfaction differ between digital banking and physical branch banking in Sri Lanka. As more customers shift toward digital platforms for convenience, it raises questions about whether digital channels consistently offer a better experience compared to traditional bank branches, if a combination of both is the most effective strategy. The study also seeks to address potential customer complaints, and challenges. The goal is to identify the best approach for delivering a high-quality banking experience in the context of Sri Lanka's evolving banking landscape.

This study will conduct a comparative analysis of customer experience across digital and physical banking channels in Sri Lanka. Ultimately, this study aims to provide valuable insights into the way that Sri Lankan banks can improve customer experience across all channels. By optimizing resource allocation and streamlining internal processes, banks can reduce costs, increase efficiency, and offer a more unified customer experience. This will allow banks to build stronger relationships with their customers, increase profitability, and stay competitive in an increasingly digital financial landscape. The findings will help identify the strengths and weaknesses of each channel and provide insights for banks to better service their customers. Customer satisfaction is influenced by various factors, including ease of use, efficiency, control, and security across different platforms. By analysing these

factors, banks can address customer complaints such as long waiting times at branches or confusing digital interfaces and improve the overall customer experience.

2. LITERATURE REVIEW

2.1 Conceptual and Theoretical Review

The Technology Acceptance Model (TAM) is one of the most widely used frameworks to understand how user come to adopt and interact with new technologies. It was created to explain the factors that determine technology acceptance, focusing on the user's attitude towards using a particular system. The model has two critical components: perceived usefulness this refers to the degree to which a person believes that using a particular technology will enhance their job performance and perceived ease of use component measures how effortless the technology appears to be. If users feel that a new system is easy to learn and navigate, they are more likely to embrace it. Conversely, if a system seems complex, requires extensive training, or is cumbersome, people will be more reluctant to adopt it, even if they believe it is useful.

Customer Experience (CX) in digital banking are grounded in service quality theories and consumer behaviour research. One of the most influential models in understanding customer experience is the SERVQUAL model developed by Parasuraman, Zeithaml, and Berry in 1985. This model was later adapted for the digital space to measure and analyse online service quality. CX in digital banking is the holistic perception that customers form based their interactions with a bank through digital channels such as mobile apps, websites, and online services. Research in this area often uses models like SERVQUAL (Service Quality) to measure in effectiveness of service delivery and customer satisfaction. It identifies five dimensions of service quality that contribute to the customer experience:

1. Tangibility: the physical appearance of facilities, equipment, and materials.
2. Reliability: the ability to provide dependable, consistence service.
3. Responsiveness: willingness to help customers promptly.
4. Assurance: employees' knowledge and their ability to install trust and confidence.
5. Empathy: the provision of caring, personalized attention.

In digital banking, these dimensions are modified to address virtual interactions, focusing more on reliability, responsiveness, security, and privacy in context of online platforms.

2.1.1 Multi-Channel and Omni-Channel Theories

The multi-channel and omni-channel models in banking are derived from theories in channel integration and customer journey management these theories highlight how customers interact with brands through various touchpoints and how seamless integration across these touchpoints leads to a better overall experience.

2.1.1.1 Multi-channel integration: a multi-channel approach emphasizes the availability of different banking services but treats each as a distinct entity. The theoretical backgro.und here is grounded in the customer decision-making progress, which is influenced by convenience, availability, and cost.

2.1.1.2 Omni-channel: banking expands on the multi-channel concept by integrating these services into a unified experience. It draws on relationship marketing theories, focusing on creating consistent, long-term interactions with customers through seamless transitions between channels.

2.1.2 Customer Experience Management (CEM) in Banking

The CEM model used in banking is based on relationship marketing and customer satisfaction theories. It focuses on managing the overall experience across various stages of the customer journey, ensuring that banks meet or exceed customer expectations at each touchpoint. This approach integrates concepts from,

1. Expectation-Confirmation Theory (ECT) proposed by Oliver in 1980, ECT suggests that satisfaction is based on the comparison between expected performance and actual performance. If actual performance exceeds expectations, satisfaction and loyalty increase.
2. Customer Journey Mapping is a concept which is grounded in service design and user experience design theory, which emphasizes mapping every interaction a customer has with a business, identifying pain points, and creating strategies for improvement.

On the other hand, there are factors which influence CX in banking such as functional and emotional drivers of customer satisfaction:

1. Functional aspects such as reliability, responsiveness, security, and privacy are essential for ensuring that banking services work effectively.
2. Emotional aspects like employee competence, communication, and physical environment are key to shaping customer perceptions and satisfaction. These are tied to theories of emotional labour and service recovery, which highlight the role of human interaction and organizational support in shaping the customer experience.
3. Brand reputation and trust are fundamental elements from brand equity theory where a well-established and trusted brand leads to higher customer loyalty and a better overall experience.

Furthermore, there are models for measuring CX such as service quality model, customer mapping and net promoter score.

1. Service quality model: as mentioned, SERVQUAL is a prominent model for digital environments to measure quality in the banking sector. It focuses on narrowing the gap between customer expectations and the actual service delivered.

2. Customer journey mapping: this method is grounded in experience-based design theory and focuses on understanding the entire customer lifecycle, from first contact to ongoing engagement. It is useful in identifying areas where customer expectations are unmet and improving those areas.
3. Net promoter score developed by Reichheld in 2003, is a metric based on customer loyalty theory. It asks customers how likely they are to recommend a company's services to other. It is valuable for banking institutions as it provides a straightforward measure of customer satisfaction and protentional loyalty, which is key in long-term relationship management.

2.2 Empirical Review

The literature review examines the role of various banking channels-both traditional and digital influencing customer relationships, operational dynamics, and strategic decision-making within the banking industry. Digital banking, particularly internet and mobile banking, has seen significant growth due to its convenience and efficiency, allowing customers to conduct transactions without needing to visit physical branches. The adoption of these digital channels is driven by factors like technological innovation, trust, and ease of use (Venkatesh et al.,2003). However, security concerns and demographic factors such as age and technical expertise still affect adoption rates (Anggraeni, Hapsari & Muslim, 2021).

Despite the rise of digital banking, traditional branch banking remains important, especially for complex transactions and customers in rural areas who prefer in-person interactions. The review notes that while branch usage is decreasing due to the convenience of digital channels, physical branches are crucial for building trust and customer relationship (Hawkins & Mihaljek, 2001). Moreover, Integrated Banking Channel Service Quality (IBCSQ) is essential in shaping customer satisfaction, perceptions, and loyalty toward banks (Aswani et al., 2018).

In Sri Lanka, digital banking is gaining momentum but faces challenges related to low adoption rates due to limited internet access and security concerns, particularly outside major urban centres (Daniel, 1999). Mobile banking, internet banking, ATMs, and agent banking have all contributed to improving financial inclusion and customer convenience, especially in underserved regions (Balkan, 2021). Furthermore, social media banking is emerging as a potential channel to enhance customer engagement and loyalty, though issues of privacy and security require further research (Anggraeni, Hapsari & Muslim, 2021).

The literature underscores the importance of a multichannel strategy, allowing customers to choose between digital and traditional channels based on their preferences and transaction complexity (Epstein, 2015). Banks that offer an omnichannel experience can better meet customer needs, thereby enhancing satisfaction and trust. Overall, the review highlights that while digital banking is rapidly growing, traditional banking methods remain relevant, particularly in specific demographic segments and rural areas.

Recent studies on digital banking have identified several factors influencing customer satisfaction, loyalty, and adoption. In Iran, Ashrafpour et al. (2021) found that customer experience, both functional and emotional, significantly impacts customer satisfaction and loyalty in online banking. Shaikh et al. (2020) noted similar findings in Finland, where mobile banking apps enhanced customer experience by focusing on ease of use and customization, resulting in improved satisfaction. Shin et al. (2020) conducted a study on digital banking in South Korea and conducted that convenience, security, and key factors that influence customer expectations. Interestingly, they found that customer and employee engagement were less significant were less significant in digital contexts compared to traditional banking. Similarly, Banu et al. (2019) highlighted the importance of trust and perceived usefulness in electronic banking in India, showing a positive relationship between these factors and customer satisfaction.

In Lebanon, Elhajjar and Ouaida (2020) demonstrated that customers with prior experience using digital platforms are more likely to adopt mobile banking services, reinforcing the importance of digital literacy in customer adoption. Santini et al. (2019) found that in electronic banking, perceived risk was not significantly influenced by the medium of banking, indicating that customers may perceive similar levels of risk whether they use online or offline channels. In a Finish study, Komulainen and Saraniemi (2019) observed that the perceived capabilities of control, trust, and social status enhance the customer experience in mobile banking. Similarly, Makanyeza and Mutambayashata (2018) conducted those social influences positively impact the adoption of debit and credit cards in Zimbabwe, underlining the role of societal factors in customer decisions.

A Study in Taiwan, found that satisfaction mediates the relationship between service quality and loyalty in electronic banking. Thakur (2014) confirmed that ease of use plays a critical role in customer satisfaction, loyalty, and service quality in mobile banking. Klaus and Maklan (2013), in their research on e-banking in the UK, found a stronger correlation between customer experience and loyalty intentions than between customer satisfaction and loyalty. A study by Liebana-Cabanillas et al. (2013) in Spain similarly indicated that trust, helpfulness, and satisfaction are important predictors of positive customer relationships in digital banking.

In India, Kundu and Datta (2012) discovered that mobile banking is predominantly used for routine transactions, such as bill payments, emphasizing convenience as a primary factor for adoption. Aldas Manzano et al. (2011), researching electronic banking in Spain, found that customer satisfaction strongly influences loyalty when perceived risk is low. The role of convenience and reliability is further highlighted by Ganguli and Roy (2011) in their study on technology-based banking in India. In Taiwan, Lin (2011) demonstrated that perceived ease of use and compatibility significantly influence customers' attitudes toward mobile banking which in turn impacts their intention to adopt the service.

The importance of trust in digital banking adoption is underscored by Lee and Chung (2009), who found that trust is the most critical factor in customer satisfaction with

mobile banking in South Korea. Earlier studies, such as Kuisma et al. (2007) in Finland, highlighted security and psychological concerns as barriers to e-banking adoption, while Flavian et al. (2005) showed that bank image plays a strong role in building trust during the early stages of internet banking adoption.

Studies such as Rajeshwaran (2020) found that all income groups, especially younger and more educated customers, are increasing adopting digital banking. This suggests that customer satisfaction in digital banking is influenced more by usability and topical relevance than by demographic factors like gender, age, or region, supporting earlier research by Mbama and Ezepue (2018), which concluded that frequency of use, age group, and duration of use positively influence digital banking experience.

The literature also notes mixed findings on the impact of gender. Vijayalakshmi and Rajasekhar (2018), for instance, observed that women tend to prioritize convenience in banking, favouring digital channels, while men are more concerned with security, which may drive a preference for physical branches. Serener (2016) further highlighted that marital status influences the likelihood of adopting internet banking with married individuals in Northern Cyprus being less likely to use online services compared to single respondents.

While digital banking continues to rise, physical bank branches still play a crucial role in customer satisfaction, particularly for services requiring personal interaction and trust. Geng, Abhishek, and Li (2015) showed that branch openings lead to short-term increases in online banking usage, though closures facilitate complex financial decisions, build customer trust, and help in the promotion of new services. Physical branches remain important for customer acquisition and building relationships, as highlighted by studies on branch closures and their impact. S&P Global Market Intelligence (2019) pointed to a global trend of bank branch closures yet emphasized that these branches still serve as key touchpoints for customer interaction, especially for individuals seeking personal advice or customers closures can cause a steady decline in online transactions.

Payments Cards and Mobile (2019) argued that physical branches, while facing closure in some regions, continue to be relevant, especially in rural areas where internet penetration is low. Studies also show that customers prefer in-person services when opening new accounts or handling complicated products like loans and mortgages, as these personalized attention and expert advice.

Physical branches are evolving to adopt a more customer-centric approach, incorporating digital tools to complement their in-person services. The integration of advanced ATM and customer relationship management technology has improved the efficiency of branches, enabling banks to better serve tech-savvy customers while maintaining trust with less digitally inclined users. Branches are also being transformed to focus on financial education and customer service, providing a holistic banking experience that integrates both digital and traditional elements.

3. METHODOLOGY

3.1 Research Design and Approach

This study utilized a quantitative research design to explore customer preferences and experiences across two primary banking channels-digital banking and physical bank branches in Sri Lanka. The research adopted a comparative approach to evaluate how demographic and experiential factors influence the preference for each channel. A survey -based method was used to collect primary data, complemented by secondary data from established databases and government websites.

3.2 Data Collection Procedure

Primary data were collected via an online questionnaire designed to capture customer experiences and performances. The questionnaire was distributed to customers of commercial banks in Sri Lanka who had experience with both digital banking and physical bank branches. The sample included respondents with additional experience in using alternative banking channels such as automated teller machines (ATMs) cash deposit machine, cash recycler machines, chatbots, and phone banking.

To ensure the inclusion of respondents less familiar with digital platforms, an alternative method of data collection was employed. In regions such as the Gampaha District, including cities like Munuwangoda, Negombo, and meerigama, responses were gathered through face-face interviewer in the online survey form. This approach ensured comprehensive coverage of banking customers across both urban and rural settings capturing a diverse range of experiences and preferences.

Secondary data sources, including academic databases like Emerald insight and Google Scholar, provided background information on customer experience in banking, as well as relevant statistics from the Central Bank of Sri Lanka. These secondary sources were used to contextualize the study within the broader literature on banking channels.

3.3 Variables and Measurements

The study incorporated both demographic and customer experience variables base on established models from previous research. The demographic variables examined were:

1. Age (continuous)

2. Gender (categorical)

3. Education level (categorical)

4. Income level (categorical)

5. Marital status (categorical)

6. Province (categorical)

7. Employment sector (categorical)

These demographic factors were included to understand their influence on customer preferences for digital or physical banking services.

CX variables measured based on four key dimensions commonly used in the literature:

1. Perceived ease of uses reflects the user's belief that using the banking channel would be free of effort (PEOU).
2. Perceived efficiency: measures the user's perception of the channel's ability to perform banking tasks quickly and effectively (PEffi).
3. Perceived control: assesses the user's sense of control over the banking process when using the channel (PCon).
4. Perceived security: captures the user's confidence in the safety and security of the banking channel (PSec).

These variables were operationalized through Likert-scale items in questionnaire, allowing for a detailed analysis of customer experiences with both digital and physical banking channels.

3.4 Analytical Framework

Two models were developed to assess customer preferences for digital banking and physical bank branches, respectively. The dependent variable in each model was binary: a consumer's preference for either digital banking or physical bank branches (yes=1, no=0). The models include continuous variables like age and professional experience and categorical variables like gender, education, income, employment sector, etc.

Model 1: digital banking (DB) preferred (1) or not preferred (0), where non-preference included a preference for either physical bank branches or alternative channels.

$$\mathbf{DB_{preferred} = \alpha_0 + \alpha\ D_{factors} + \alpha_1\ PEOU + \alpha_2\ PE\ ffi + \alpha_3\ PCon + \alpha_4\ PSec + e}$$

Model 2: physical bank branch (PBB) preferred (1) or not preferred (0), where non-preference included a preference for either digital banking or other alternative banking channels.

$$\mathbf{PBB_{preferred} = \beta 0 + \beta D_{factors} + \beta\ D\ factors + \beta_1\ PEOU + \beta_2 PEffi + \beta_3\ PCon + \beta_4\ PSec + e}$$

The binary nature of the dependent variables led to the selection of probit regression as the primary analytical technique. The probit model is appropriate for cases where the dependent variable is dichotomous, allowing for the estimation of the probability that a customer prefers one channel over another based on the independent variables.

3.5 Probit Regression Analysis

Probit regression analysis was conducted using Stata software (version 14.2). this analysis aimed to identify significant predictors of customer preferences for either digital or physical banking channels. Independent variables included both the demographic factors (age, gender, education, income, marital status, province, and employment sector) and the customer experience variables (perceived ease of use, perceived efficiency, perceived control, and perceived security).

The results from the probit regression analysis were compared across the two models to examine differences in the factors influencing the preference for digital banking versus physical bank branches. This comparative analysis helped identify which variables play a more prominent role in driving customer preferences for each channel.

3.6 Hypotheses Development and Testing

Hypotheses were formulated based on insights from existing literature on banking channel preferences and customer experience. Each hypothesis proposed a relationship between the independent variables (demographic and customer experience factors) and the likelihood of customers preferring digital banking or physical bank branches. These hypotheses were tested through the probit regression models, with statistical significance evaluated using conventional thresholds (e.g., p-values).

H1: There is a relationship between banking channel preference and the customer's age.

H2: There is a relationship between banking channel preference and the customer's education level.

H3: There is a relationship between banking channel preference and perceived security.

The null hypotheses would state that no such relationship exist.

Where are the hypotheses which formulated to test the preference for digital banking channels or physical branches? Since two models have been set up, there should be two separate hypotheses to test the validity of each modal.

4. DATA ANALYSIS AND DISCUSSION

4.1 Comprehensive Analysis of Descriptive Statistics

The descriptive statistics analysis provides an overall understanding of the distribution and characteristics of the respondents in this study. The average age of respondents is around 36 years, indicating that the sample comprises mostly adults in their prime working years. With a standard deviation of nearly 13 years, the age distribution is relatively spread out, suggesting a significant variation in the ages of

respondents. The average respondent has around 11 years of professional work experience. The wide standard deviation indicates a significant range of experiences. A significant majority (76.68) of the respondents have tertiary education, including that most of the participants are well-educated. This suggests that findings may reflect the perspectives of a more educated segment of the population. Only about a quarter of the respondents have primary or secondary education, which may point to potential differences in financial and banking literacy levels.

The most common income bracket is 50k-100k (42.69%), showing that most respondents belong to middle income households. The higher income brackets (100k+) make up about 35% of the sample, indicating a significant portion of respondents with above average incomes, which could influence their banking preferences and behaviour. The presence of low-income respondents (22.53%) ensures that the study also captures the experiences of individuals who might be more price sensitive or less digitally equipped.

The nearly even split between married and unmarried respondents suggest that the sample is diverse in terms of family status. This factor might influence preferences related to financial planning savings and banking needs.

A slight majority of respondents are from the Western Province, which could mean the result may be more reflective of individuals from urban or densely populated regions. The representation from outside Western Province (43.87) is still substantial, ensuring that perspectives from more rural or less urbanized regions are also considered. Most respondents work in the private sector (68.77), suggesting that the findings may reflect the perspectives of individuals working in corporate or business environments, which could influence their banking preferences. The public sector representation (31,23%) ensures that views from government employees are also captured.

The majority of respondents prefer digital banking (60.87%), indicating a significant shift towards online banking and a reduced reliance on physical branches. However, a notable portion (20.16%) still prefers physical branches, highlighting the ongoing need for physical bank services, particularly for those who may not be as comfortable with digital platforms. A large majority of respondents (80.24%) report positive experiences with the ease of use of digital banking, suggesting that digital banking platforms are user friendly and accessible for most individuals. Positive experiences with physical bank branches are slightly lower (55.34%), indicating that while many are satisfied with traditional banking, it is perceived as less convenient compared to digital options. Digital banking is rated highly efficient by most respondents (81.82%), further reinforcing the growing preference for online services over physical branches. Physical branch efficiency is still rated positively by more than half (59.68%), but the lower score compared to digital banking suggest room for improvement in the traditional banking sector.

Digital banking offers a sense of control to 71.15% of users, indicating that user feel empowered and in control of their finances through digital platforms. Physical branches are rated positively by 60.87% of respondents, but the slightly lower rating

may indicate that digital platforms offer greater flexibility and autonomy. While most responds feel secure using digital banking (67.98%), the higher security rating for physical branches (84.19) suggests that traditional banking methods are still viewed as more secure. This could imply that security concerns remain a key barrier to digital banking adoption, despite the overall positive experience with digital platforms.

4.2 Analysis of Inferential Statistics

The study examines two probit regression models to analyse customer preferences for banking channels in Sri Lanka. The dependent variables are binary, with model 1 predicting preference for digital banking (DB) and model 2 predicting preference for physical branch banking (PBB). Each model uses various demographic and experience related factors as independent variables. Maximum likelihood estimation methods were employed to estimate the models, with pseudo R^2 values reflecting the fit.

Table 1: Probit Model for Digital Banking Channel (DB Preferred)

Variable	Coefficient	Z-statistics	P-value	Significance
Intercept	3.161	0.428	>0.1	Not significant
In Age	-2.087	-	>0.1	Not significant
Tertiary Education	3.327	3.214	<0.01	***
Male	-0.589	-0.824	>0.1	Not significant
Income 50,000	0.667	0.616	>0.1	Not significant
Income 100,200	0.590	0.529	>0.1	Not significant
Income 200+	2.474	1.516	>0.1	Not significant
Married	1.150	1.173	>0.1	Not significant
Outside Western Province	-1.190	-1.851	<0.1	*
Employment Sector (Public)	0.0221	0.0335	>0.1	Not significant
EOU DB (Positive)	0.859	1.276	>0.1	Not significant
Effi DB (Positive)	0.346	0.553	>0.1	Not significant
Employment Sector (Public)	0.0221	0.0335	>0.1	Not significant
EOU DB (Positive)	0.859	1.276	>0.1	Not significant
Effi DB (Positive)	0.346	0.553	>0.1	Not significant
Sec DB(Positive)	1.989	2.517	<0.05	**
Sec DB (Positive)	2.309	2.327	<0.05	**

Pseudo R^2 value: >0.8 (indicating good fit)

Table 2: Probit Model for Physical Branch Banking Channel (PBB Preferred)

Variable	Coefficient	Z-statistics	P-value	Significance
Intercept	-2.838	-2.170	<0.05	**
In Age	0.860	-	<0.05	**
Tertiary Education	-0.884	-3.505	<0.01	***
Male	0.121	0.624	>0.1	Not significant
Income 50,100	-0.393	-1.495	>0.1	Not significant
Income 100,200	-0.565	-1.792	<0.1	*
Income 200+	-0.327	-0.893	>0.1	
Married	-0.235	-0.962	>0.1	Not significant
Outside Western Province	0.171	0.937	>0.1	Not significant
Employment Sector (Public)	-0.0961	0.473	>0.1	Not significant
EOU DB (Positive)	0.317	1.216	>0.1	Not significant
Effi DB (Positive)	0.138	0.529	>0.1	Not significant
Con PBB (positive)	0.215	0.883	>0.1	Not significant
Sec PBB (positive)	0.0654	0.223	>0.1	Not significant

Pseudo R^2 value: <0.5 (indicating a moderate fit)
In both tables, significance levels are denoted as,
P < 0.01 (Highly significant) P <0.05 (Significant) P < 0.1(Slightly significant)

In model 1 (DB) the coefficient for age is negative but statistically insignificant. This suggests that age does not significantly impact preference for digital banking. But in model 2 (PBB), age is positively and statistically significant ($p<0.05$), indicating that older customers are more likely to prefer physical branch banking. Specially, for each unit increase in log age, the probability of preferring physical branches by approximately 0.86, meaning that as age increases, does the preference for physical branches. Tertiary education is highly significant ($p<0.01$) and positively related to digital banking preference with a coefficient of 3.327 in the model 1. This suggests that customers with tertiary education are over three times more likely to prefer digital banking compared to those with only primary or secondary education. In model (PBB), tertiary education shows a significant negative relationship ($p<0.01$) with physical branch preference, with a coefficient of -0.884. This indicates that individuals with higher education levels are less inclined to prefer physical branch banking, potentially due to grater digital literacy or access to digital resources.
The coefficient for male is -0.589, with a non-significant z-statistic (-0.824), indicating that gender does not have a statistically significant impact on digital preference in model 1. Although not significant, the negative coefficient suggests a slight tendency for males to have a lower preference for digital banking than females, but this is not strong enough to draw a definitive conclusion. However, in model 2, the male coefficient is 0.121, again non-significant (z-statistic 0.624), meaning

gender does not significantly influence the preference for physical branch banking either. The positive coefficient, while not significant, suggests that males may have a slightly higher preference for physical branches compared to females, but this effect is too weak statistically to be meaningful. In both models, gender does not significantly affect the choice between digital banking and physical branches. Thus, any observed trends by gender are likely due to random variation in the sample rather than a genuine effect.

Model 1 imply that none of the income categories significantly influence the preference for digital banking, suggesting that income level does not play a meaningful role in the choice of digital banking in Sri Lanka. Model 2 suggests that customers with moderate income may have a minor inclination away from physical branch banking, but high and low-income categories show no clear trend in preference. These interpretations highlight that both gender and income generally have limited influence on the choice between digital and physical banking channels in this study, with only minor effects observed in specific income ranges. The marital status variable is not significant, although married individuals show a slight, non-significant increase in preference for digital banking. Similarly, marital status does not significantly affect preference for physical branch banking, indicating limited influence on channel preference based on marital status. A slightly negative significant coefficient suggests that customers outside the Western Province are marginally less likely to prefer digital banking, possibly due to limited access to digital banking. Province is not a significant predictor, meaning that preference for physical branches does not very significantly by location.

Perceived control and perceived security are positively significant, indicating that positive experiences in these areas increase digital banking preference. Specifically, customers with positive perceptions of digital banking control and security are almost twice as likely to prefer digital banking with coefficients of 1.989 and 2.309, respectively. None of the customer experience factors significantly impact preference for physical branch banking, suggesting that experience factors in model 2 are less influential on physical branch preference.

4.3 Hypothesis Testing Analysis on Banking Channel Preferences

This analysis employs probit regression to assess whether customer characteristics – age, education level, and perceived security- significantly impact banking channel preferences in Sri Lanka, specifically digital banking (DB) and physical bank branch (PBB) usage. Each hypothesis is evaluated using a 95% confidence interval, where a p-value <0.05 indicates significance.

Hypothesis 1: Relationship between Age and Banking Channel Preference

The analysis shows no significant relationship between age and preference for DB, as the p-value is above 0.05. Therefore, the null hypothesis, which states that age does not influence digital banking preference, is accepted.

For PBB, there is a significant positive relationship with age. This result supports the alternative hypothesis, suggesting that older customers are more likely to prefer physical bank branches. Age has no significant impact on digital banking preference, while it positively influences physical branch preference in the Sri Lankan context.

Hypothesis 2: Relationship between Education Level and Banking Chennel Preference

Both DB and PBB, education level is highly significant in both models. This indicate that customers with tertiary education are more likely to prefer digital banking. Customers with only primary or secondary education tend to prefer physical bank branches. Finally, education level has a strong influence on banking channel preference, with higher education linked to digital banking preference and lower education linked to physical branch. Education level has a strong influence on banking channel preference, with higher education linked to digital banking preference and lower education linked to physical branch preference.

Hypothesis 3: Relationship between Perceived Security and Banking Channel Preference

Perceived security has a significant positive impact on DB preference. Thus, the alternative hypothesis is accepted, suggesting that perceived security is a key factor in digital banking preference. No significant relationship is found between perceived security and PBB preference, with the p-value exceeding 0.05. Therefore, the null hypothesis is accepted, implying that perceived security does not influence physical branch preference. Perceived security affects digital baking preference but has no significant impact on physical branch preference in the Sri Lankan setting.

5. CONCLUSION AND POLICY RECOMMENDATION

5.1 Conclusion

This study found that customer preferences and satisfaction levels in Sri Lanka's banking sector vary significantly between digital and physical channels. While younger, customers prefer the convenience and efficiency of digital banking, older generations and customers with lower technological literacy shows a preference for traditional bank branch. Key factors such as perceived security and control are especially crucial for customers using digital channels, where trust and usability are paramount to enhancing satisfaction. The study suggests that banks can improve customer experience by addressing unique demographic needs- such as providing additional support for seniors or enhanced security features for tech-savvy, security-conscious customers. To foster a more integrated and accessible banking environment, Sri Lankan banks should aim to offer a seamless omnichannel experience that combines the accessibility of physical branches with the efficiency of digital services, ultimately enhancing customer satisfaction and loyalty across diverse user segments.

This study reveals that a seamless, secure, and personalized banking experience across digital and physical channels is crucial to meeting diverse customer needs in

Sri Lanka. Banks that cater specifically to demographic needs- where through physical branch support for seniors or digital enhancement for educated user- stand to boost satisfaction and retention. Embracing technologies like AI and chatbots, prioritizing clear, consistent communication, and facilitating smooth transitions across channels can further strengthen customer experience.

As Sri Lankan banks evolve with digital trends, the emphasis on security, ease of use, and integration will become essential to fostering customer confidence. By implementing these targeted strategies, commercial banks can create a customer - centric approach that adopts to varying preferences, ultimately enhancing loyalty and satisfaction across all demographics.

5.2 Policy Recommendations

Enhance accessibility for seniors: Improve physical branch accessibility by installing ramps, wider doorways, and specialized counters for senior customers. Staff training on respectful communication and simplified banking processes can improve the senior customer experience.

Promote digital literacy for older adults: Organize workshops at branches and community centres to educate seniors on online and mobile banking, focusing on navigation, cybersecurity, and simplified interfaces.

Develop user-friendly digital platforms: Invest in intuitive digital banking interfaces that accommodate varying levels of tech proficiency, especially for older customers. Provide features like biometric login options, customizable dashboards, and straightforward navigation to improve usability.

Security enhancements for all customers: Strengthen security with muti-factor authentication, strong encryption, and regular security audits. Make security measures transparent to customers, and proactively educate them about identifying fraud and resolving security concerns.

Seamless omnichannel experience: Enable smooth transitions between physical and digital channels by integrating services. Allow customers to start transactions online and complete them in-branch if necessary and offer phone and video support for assistance.

Personalization for educated and tech-savvy users: Use customer data to tailor services, such as targeted product recommendations, financial insights, and customized alerts, focusing on efficiency and personalized financial management tools.

Proactive customer engagement and feedback: Regularly gather and analyse customer feedback through surveys and social media to address emerging needs, adjust services, and improve overall customer satisfaction.

By implementing these recommendations, Sri Lankan banks can enhance across demographics, build trust, and foster customer loyalty by offering a secure, accessible, and personalized banking experience.

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