
| RESEARCH ARTICLE

Transitioning Towards a Fully Digital Banking Environment: Analyzing Financial Consumption Preferences of Metro Manila Banking Customers

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| ABSTRACT

The emergence of technology, combined with the adoption and integration of new practices, has greatly affected multiple business fields, including the Philippine banking industry. This leads to the entrance of fully digital banking platforms, a potential alternative to brick-and-mortar banks. Would Metro Manila banking customers utilize fully digital banks, or would they prefer the established traditional banking institutions as their personal choice for financial services and transactions? By surveying 385 respondents, the researchers obtained and analyzed information about the preferences and behavior of banking customers to learn more about the degree to which customer characteristics affected their preferences for certain banking products. This study proved that Metro Manila banking customers have a strong inclination towards physical or traditional banks, given that 60.5% of the total respondents are traditional banking users compared to 4.4% for fully digital banks and 35.1% for both traditional and fully digital banks. Decision variables such as convenience, efficiency, customization/personalization, security, and privacy also played a significant role in evaluating and assessing customer motivation in determining a preference. The results yielded a more localized and concentrated approach that exhibits the factors regarding traditional and fully digital banks that would potentially help the Philippine banking industry to adjust and adapt to emerging technology and consumer needs.

| KEYWORDS

Digital Banking, Technological Adoption, Banking Processes, Traditional Banking, Consumer Preference

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1. Introduction

The banking industry has been evolving over the past years, resulting in the banking system's improvement and expansion (Oxford Business Group, 2019). Consequently, the banking industry has been adapting to consumer demand changes, particularly in modernizing the traditional banking systems that the industry has already been accustomed to. Online banking was introduced to the Philippines reasonably recently despite improvements in traditional banking. Its services have become increasingly prominent among customers who find online banking convenient and straightforward (Depusoy, Romuar & Nartea, 2020). The rise of digital banking platforms is evident in the Philippines as many traditional banks such as Bank of the Philippine Islands (BPI), Banco de Oro (BDO), Philippine National Bank (PNB), LandBank, Security Bank, Metrobank, and many more have opted to provide online applications to cater to digital banking demands by their consumers. Moreover, new digital platforms such as GCash, PayMaya, and PayPal have also partaken in the digital banking demand (Szijarto, 2017). However, this study focuses on fully digital banks (banks without physical institutions) such as CIMB Bank and ING Bank.

With the increase in technological advancements, the digitalization of the processes in several sectors, including the financial industry in the form of online banking, has made headways in the Philippine market and worldwide (Nirmala & Pavithra, 2019). As more consumers, especially the younger generations, increasingly use digital banking for their daily transactions such as online shopping, physical shopping, bills payments, transfer of money, purchase of goods and services, and more, the rise of digital banking has become a relevant topic for the financial sector (Camilleri & Grech 2017).

Some factors associated with the positive response of consumers to the digital banking platform include convenience as it prevents having to physically be present to conduct their monetary transactions, efficiency as it allows real-time transfers and check balances, and customization as it enables consumers to create automated bills payments, fund requests, and more. However, some issues that have been highlighted by consumers who are wary of digital banking include its decreased security and privacy as many of these platforms can be easily hacked into, and the money within such digital accounts may easily be transferred to accounts without any names (Khurana, 2019).

Literature related and similar to the research topic signifies those studies about digital and online banking are already published in different parts of the globe. Existing literature utilized a more concentrated approach to online banking by gathering information from the local respondents of a specific country or area. Even though this kind of technological advancement in the banking industry has been introduced in developed countries worldwide, it is not the same for a developing country like the Philippines. Given that digital banking emerged in the Philippines recently, studies related to consumer perceptions about digital and traditional banking are few to nonexistent. In order to understand the Filipino consumers and their perception of banks' digitalization, it is necessary to gather relevant information from bank consumers residing in the Philippines. With a more concentrated and domestic approach to the topic, the researchers could understand the consumers' behavior more than just the bank consumers' results from different countries.

2. Literature Review

2.1 Traditional Banking Practices

Banks are traditionally known for accepting deposits, building the economy, and reducing poverty through capital allocation and management. Traditional banking in Southeast Asian countries has gone through substantial changes and deregulation of systems ever since the 1997 financial crisis to prepare for the foreseen deepening of adverse financial conditions globally and ensure the survival of their economic and financial development. Mohd Khan, Samsudin & Islam (2017) have depicted the success and resilience through bank efficiency of Southeast Asian countries considering the 1887 financial crisis, except for Indonesia and the Philippines, which lag behind Malaysia and Thailand.

In line with this, banking is known for risk-taking as it fulfills the intermediary's role by accepting deposits and lending money. As much as banks can improve an economy, they may also adversely affect it when their risk-taking results in failure. Mendoza & Rivera (2017) discussed how the Philippines' banking system includes three categories of its banks: (1) universal and commercial banks, (2) thrift banks, and (3) rural and cooperative banks. Focusing on the third kind of bank, the Philippine rural banking sub-system is governed by the Rural Bank Act of 1992, making necessary credit available and accessible in rural areas to promote and expand their economy. However, due to its small size, the effects of failure due to credit risks are more largely felt, thus necessitating the protection of rural banks.

2.2 Virtual Banking

Brick-and-mortar companies are forced to adapt to the new technological innovation environment, requiring the online presence and branding strategies and development. Financial services institutions and banks are not exempted from these changes as digital banking has increased the industry's competitiveness. With the rise of technological innovation, the Philippines' financial systems have seen a surge in alternative formal channels that deliver financial services such as mobile banking due to the rise in the use of smartphones among Filipinos. Chiu, Bool, and Chiu (2017) conducted a study that found that 101.9 million Filipinos had a mobile phone despite their economic status by the end of 2012. It was discussed how financial institutions desire to reach a more significant portion of the population through using mobile phones to provide financial services, mainly banking services. This includes account balance inquiries, monitoring their account transactions, paying bills and loans, transferring funds, receiving and sending remittances, and even payroll services. Moreover, the rise of mobile banking has significantly decreased traditional banks' operating expenses. However, many Filipinos are still wary of using digital banking due to disposition to trust, infrastructure quality, perceived costs, and privacy and security.

Similarly, Gupta & Xia (2018) discuss how Financial Technology (FinTech) disrupts existing traditional banking systems in Asia. The study finds 49% of Global Investments in FinTech in Asia, with China accounting for 46% of this figure. M-wallets and online payments dominate the ASEAN FinTech industry. FinTech is known for technologies such as big data, blockchain, or cloud systems that compose back-end systems utilized by established financial institutions and initially failed to adapt a user-oriented focus. However, new technologies have introduced changes to fintech, prompting the same to emphasize its new-user focus due in part to increased competition (Tajimi, 2021). Fintech and digital banking are two terms that are often interrelated due to their association; however, digital banking is only one of the various kinds of financial technologies available (Son, Kwon, Tayi, & Oh, 2019).

Compared to traditional banking, digital banking has a more user-oriented approach due to the previous concentration of power of large and established traditional banks, whose competitive edge was originally solely their substantial capital (Frost, Gambacorta, Huang, Shin & Zbinden, 2020). Consequently, new banks and financial services were barred from entering the industry or growing, leaving consumers with few to no options other than the most prominent traditional banks. With few options available, traditional banks maintained their service and had no interest in improving their services to make them more user-oriented (Christophers, 2018). As a result, several people, especially small local businesses, would find it extremely difficult to access or be approved for loans (Connolly & Bank, 2018). It is evident how outdated traditional banking systems are compared to modern-day digital banks and financial technologies, causing significant disruptions to the big bank monopoly. To provide some context, digital banking needs to rely on the newest cutting-edge technological innovations and customer satisfaction to compete with traditional banks and their digital bank competitors (Anagnostopoulos, 2018).

2.3 Financial Literacy of Filipinos

The Philippines is a third-world country and is currently a developing country. For a developing country striving for sustainable economic development, financial literacy is essential that an individual must acquire. Financial education also has a critical role in financial inclusion, according to Llanto G (2015). This would guide individuals in their attitude and behaviour to prevent poor financial management. As stated by Montalbo et al. (2017) stated that with the lack of financial education, they do not entirely comprehend the influence of interest rates on saving and borrowing and the direct impact on certain people's profits.

According to the study by Llanto & Rosallon (2017), Adults with only an elementary or high school diploma are less likely to transact, own a savings account, or have access to credit and insurance products and services than adults with a degree. De Castro, Salamat & Tabor (2020) suggest that financial learning must be introduced in schools at an early stage of their education: having a good role model would also help individuals nurture their comprehension of financial behavior. With appropriate technologies and applications, this would help the unserved and unbanked sector open opportunities in managing their amounts of money, according to Llanto, Rosallon & Ortiz (2018).

One article stated that about 71% of the adult population in the Philippines in 2019 was under the unbanked sector (BSP, 2019). They keep their savings at home, and a large portion of the population borrows through informal channels. Llanto (2015) suggests that the demographic of an individual and cultural factors are some of the barriers that hinder Filipino consumers from availing themselves of bank services. Thus, the low-income and poor populations are being limited to improving their income activities profit.

2.4 Factors of Consumer Preferences in Banking

Chiu, Bool, & Chiu (2017) likewise discusses how demographic variables, including age, gender, education, household income, and marital status, could affect consumers' initial trust and willingness to use mobile banking. Understanding the differences in the needs and preferences of people with different demographics may help us alleviate the fear and lack of understanding that deters them from using mobile banking, consequently limiting the adoption and retention of fintech, such as digital banking. Notably, individuals who manifest entrepreneurial characteristics and inclinations are known for being risk-takers. These types of people would most likely be willing to use mobile or purely digital banking during its introduction to the market. Digital banking may face certain stigma surrounding their security and privacy issues as many Filipinos are known to be cautious of their monetary assets. According to Chiu, Bool, & Chiu (2017), effective marketing services rely on building trust before a customer uses online services, as maintaining customer confidence is a crucial factor in building customer relationships.

Compared to traditional banking, digital banking is known for being more convenient as it eliminates the need to travel to banks to facilitate their financial transactions physically (Ozili, 2018). It is reasonable for consumers to perceive digital banking due to the utilization of fast data transactions from the internet. Based on the study conducted by Jebarajakirthy and Shankar (2021), convenience is one of the most significant motivators for consumers in terms of digital banking. It is essential for banks to know how to provide satisfaction through convenience to stimulate mobile banking adoption.

Digital banks have been growing in the industry, which is recognized as revolutionary. According to Baptista et al. (2016), mobile payment is gaining popularity as a viable alternative to cash, checks, and credit cards from consumers to retailers. However, some users are reluctant due to the security, and hackers can acquire consumers' information such that it may bring risk to the consumers. According to recent research, security difficulties and issues affect customer satisfaction in multiple online banking activities (Li et al., 2021). Although security is a significant concern for all customers, (Aboobucker & Bao, 2018) concluded that the older age group is more likely to resist digital banking features due to their perceived risk and security. Based on a study by Salihu et al. (2019), improving the efficiency of various processes on mobile banking and developing and implementing reliable security measures directly and significantly impacts convincing consumers and reducing issues in the innovative experience or digital banking.

Beginning with big data, digital banks are known to use completely electronic documents and information as opposed to traditional banks that use physical documentation, allowing digital banks to access more and more specific data collected from users online (Jagtiani & Lemieux, 2017). Big data uses and processes a considerably large amount of data, which humans normally could not. Using big data allows digital banks to better understand different demographics, consumer behavior, and financial activity behavior. Additionally, digital banks can track and analyze all these data in bulk as opposed to traditional banks (Kshetri, 2016). As such, digital banks can use this data to personalize their platforms better and optimize their services to fulfill their client's needs better and wants, thus achieving more customer satisfaction (Parise et al., 2016).

Traditional banks are more known for security as traditional banks are known for being substantially more reliable, as digital banks are more at risk of technical problems due to their reliance on technology (Thakor, 2020). Moreover, digital banks also have substantial security risks as they rely on cloud computing, a centralized system that allows the delivery of services to be facilitated online (e.g., cloud storage). Likewise, cloud computing enables a faster and more centralized updating or upgrading of the system, potentially saving a notable amount of time and money on the bank (Osmani, 2021). Unfortunately, cloud computing is a centralized system that could cause thousands and thousands of users to lose access to their accounts and potentially their funds if hacked. Moreover, digital banks can analyze and process the activities of their clients in real-time, resulting in their ability to immediately detect breaches of privacy, changes in spending patterns, and other indicators of a security risk on the part of their clients through their Anti-Money Laundering Transaction Monitoring (AML Monitoring) (Ketenci et al., 2021).

2.5 Consumer Preferences on Banking Based on Generations

The banking sector's adoption of digitalization and implementation of online banking services opened new opportunities for financial services and their customers. In line with that, consumer preferences for digital and traditional banking became more comparable.

According to Laukkanen (2016), age is a significant factor or identifier for adopting or rejecting digital banking services, and 55+ years old bank customers are more resistant to adopting mobile banking than younger individuals ranging from 18 to 35 years old. However, Laukkanen's study is based on Finland, a well-developed country with high-income earners. Their previous studies may have a significant disparity in an Asian country with different consumer behavior like the Philippines.

Chaouali and Souiden (2019) claimed that cognitive age significantly influences consumers' adoption or resistance to mobile banking. They also clarified the difference between biological and mental maturity and how cognitive age could be essential in analyzing consumers' resistance to mobile banking. As one's cognitive aspect continues to age, it is more likely that an individual could be more resistant to innovation.

Based on a study conducted by Choudrie et al. (2018), adopting mobile banking is also based on a consumer's lifestyle. As for younger generations who rely heavily on smartphone use daily, young individuals would be more likely to adopt banking innovations. On the contrary, older adults do not see the importance of using smartphones and the internet since it does not fit their lifestyle. More than that, adopting digital banking would need to understand how smartphone and online banking works. These factors are the perceived risks experienced by banking customers that could potentially be barriers to understanding and utilizing the value of mobile banking.

3. Methodology

This research employs a descriptive-comparative research design whereby data is gathered to ultimately show and compare the variables, in this case, factors, and determine the comparative strength of their effects on the respondents' preferences between traditional and fully digital banking. A descriptive-comparative research design is necessary for this study. It enables the analysis of the interplay between the triumvirate among the demographic factors and the ultimate preference of the respondents between traditional and fully digital banking.

The respondents for the study are Filipino who reside in Metro Manila whose age ranges from 18 to 56 years old. Consumers' age and demographics were also taken into consideration to answer the aims of the study. To qualify to be a respondent, they should have been using a bank account for the past six months, whether a traditional bank or a fully digital bank. The researchers used a probability sampling technique in a simple random sampling technique. Participants were randomly picked to answer the questionnaires to know their thoughts and perception about the topic and the problem of the study. The Raosoft sampling formula determined the sample size of the study. The recommended sample size is 385, using the Raosoft sample size calculator with a 5% margin of error and 95% confidence level.

3.1 Data Analysis

Phase I: Preparation

The researchers developed thirty-eight questions to use in the questionnaires based on the overall objective of the study. The Cronbach's alpha was used to measure the reliability and validity of the surveys.

Phase II: Evaluation

A questionnaire was prepared, checked, and revised under the supervision of an adviser. The survey received approval from the adviser before it was distributed to collect data.

Phase III: Actual Data Gathering

To gather data concerning the pandemic's prevalence, researchers developed an online survey using Google Forms. They distributed the survey with the help of social media, requiring participants to meet certain criteria before answering.

Phase IV: Data Analysis

To examine students' preferences for certain types of banking, the researchers conducted a survey that used both frequency and percentage to interpret the data. The researchers used an online survey to compile responses and organized the data in a spreadsheet. Following the data collection, a comprehensive discussion was undertaken on the findings. The conclusion was then developed based on these discussions.

4. Results and Discussion

Presented in this specific portion of the study are the results and data analyzed and interpreted using tables and textual explanations.

Hypothesis 1: Metro Manila banking customers have a firm preference for traditional banking establishments.

Table 1. Preference toward traditional, fully digital, and both traditional and fully digital banks

Type of Bank	Banking platform used	Banking platform for saving money	Banking platform used for daily transactions
<i>Physical or traditional banks</i>	60.5%	52.6%	37.9%
<i>Fully digital banks</i>	4.4%	11.5%	22.6%
<i>Both traditional banks and fully digital banks</i>	35.1%	35.8%	39.5%

Based on the gathered data, the majority of the respondents, which is 60.5%, have already used a physical or traditional banking platform which asserts the approval of the study's first hypothesis. Moving further, 52.6% of the respondents use traditional banks to save money. Both of the percentages presented demonstrate a significant lead against fully digital banks, given that only 4.4% of the respondents use it as the only type of platform for financial transactions. However, the respondents exhibited a tendency to avail of both if given a chance. Regardless of this chance, it is still evident that there is a firm preference for traditional banking establishments.

Table 1.2. Preferred banking platform for loans

Type of Bank	Percentage
<i>Physical or traditional banks</i>	71.8%
<i>Fully digital banks</i>	8.2%
<i>Both traditional and fully digital banks</i>	20%

Contrary to Connolly and Bank's idea about how loans become more difficult to access and stagnant in terms of creating a more user-oriented experience, the results show that physical banks prevailed with 71.8% against 8.2% for fully digital banks. Although choosing traditional banks could entail a more time-consuming experience, especially when it comes to processing a loan, individuals could trade the quickness of the process in return for having a more credible and secured transaction with established banks, namely the traditional banking platforms.

Table 1.3. Preferred banking platform if limited to only one type of bank

Type of Bank	Percentage
<i>Physical or traditional banks</i>	69.2%
<i>Fully digital banks</i>	30.8%

There are several scenarios where an individual is only capable of maintaining one bank account. Taking into consideration the data gathered under this table, most respondents (69.2%) would forego all offerings of digital banks in order to secure their traditional bank accounts compared to only 30.8% who will choose fully digital banking whenever limited to choose only one banking platform. This is a direct contradiction to the evolution of the banking paradigm depicted by the oxford business group in 2019.

The next data set depicted under tables 1.4.1 through 1.4.5 pertains to the instance where the respondents will decide if they are able to scatter their funds beyond one account.

Table 1.4.1. Allocation of deposits between traditional and fully digital banks (100%)

Deposit Percentage	Respondents' Percentage
<i>100% on traditional banks</i>	22%
<i>100% on fully digital banks</i>	2.3%

For respondents who will still keep all their funds under one type of account, 22% will place all of them on traditional banks with a steep difference with 2.3% who will keep all of them with fully digital ones. This is in line with the theories of (Khurana, op cit) regarding the risk still associated with digital banks.

Table 1.4.2. Allocation of deposits between traditional and fully digital banks (80% and 20%)

Deposit Percentage	Respondent Percentage
<i>80% on traditional banks, 20% on fully digital banks</i>	19%
<i>80% on fully digital banks, 20% on traditional banks</i>	5.6%

Table 1.4.3. Allocation of deposit between traditional and fully digital banks (70% and 30%)

Deposit Percentage	Respondent Percentage
<i>70% on traditional banks, 30% on fully digital banks</i>	14.4%
<i>70% on fully digital banks, 30% on traditional banks</i>	7.2%

For tables 1.4.2 and 1.4.3, the data clearly shows the evident difference between respondents' choice of allocating 80% and 70% on traditional banking platforms. With 19% and 14.4%, respectively, the majority of the banking customers will choose to allocate a larger portion of the assumed deposit amount to traditional banks. Following the other tables presented, the deposit percentages of 100%, 80%, and 70% on traditional banks serve as a part of the top 4 choices in this specific section which indicates another proof that affirms the first hypothesis of the study.

Table 1.4.4. Allocation of deposits between traditional and fully digital banks (50%)

Deposit Percentage	Respondent Percentage
<i>50% on traditional banks, 50% on fully digital banks</i>	17.7%

On the other hand, allocating assets on a 50-50 basis is interpreted as the acknowledgement of both platforms. This option holds the second-highest percentage, with 17.7%. As the researchers observe and analyze the results, this type of choice is perceived as the safe choice, given that PHP 1,000,000 will be equally allocated on both types of platforms.

Table 1.4.5. Allocation of deposits between traditional and fully digital banks (60% and 40%)

Deposit Percentage	Respondent Percentage
60% on traditional banks, 40% on fully digital banks	6.7%
60% on fully digital banks, 40% on traditional banks	4.9%

Given the fact that the majority of the respondents are leading towards bringing a large portion of their allocation to traditional banking platforms, 6.7% and 4.9% of the respondents preferred to choose the option of allocating 60% to traditional banks and 60% on fully digital banks respectively. Compared to the nearest choice available in the question, which is the 50% option for both platforms, this specific option has a relatively low percentage which signifies that the majority of Metro Manila banking customers prefer either allocating all or the majority of their funds to traditional banks or choose the balanced option which still brings a percentage of not less than 50% when it comes to traditional banking.

The results clearly affirm the first hypothesis regardless of being perceived and analyzed in different aspects of banking transactions. Despite the emerging trend in digital transactions, a large portion of Metro Manila banking customers still prefer traditional banking services even though new types of services could deliver an easier and more accessible experience.

Hypothesis 2: Demographic segmentation profiles determine the decision to accept fully digital banks.

Table 2. Preferred banking platform for applying for loans according to the respondents' income bracket

Income Bracket	Traditional	Digital	Both
<i>Less than ₱10,957</i>	78.33%	7.50%	14.17%
<i>₱10,958 to ₱ 21,914</i>	54.35%	15.22%	30.43%
<i>₱21,915 to ₱ 43,828</i>	62.37%	8.60%	29.03%
<i>₱ 43,829 to ₱76,699</i>	73.13%	5.97%	20.90%
<i>₱76,700 to ₱131, 484</i>	80.65%	12.90%	6.45%
<i>₱131,485 to ₱219,140</i>	95.00%	0.00%	5.00%
<i>₱219,141 and above</i>	75.00%	0.00%	25.00%

From the income bracket of ₱10,958 to ₱ 21,914 to ₱131,485 to ₱219,140, there is an increasing preference for traditional banking only. There is also a decreasing use of both traditional and fully digital banking platforms from the income bracket of ₱10,958 to ₱ 21,914 to ₱131,485 to ₱219,140. Those falling under the income bracket of less than ₱10,957 and ₱219,141 and above seem to be outliers to the trend. As for users that use fully digital banking platforms only, there is no clear trend as it tends to increase then decrease as the respondents change income brackets. However, the higher-income brackets of ₱131,485 to ₱219,140 and ₱219,141 and above do not use fully digital banking on their own and would instead rely on traditional banking only or a mix of both traditional and fully digital banking platforms for their loans. These findings go against the hypothesis that demographic segmentation profiles determine the decision to accept digital banks.

Rather than determining the decision to accept digital banks, which lack a clear trend based on the income brackets of the respondents, it seems that the same is more likely to determine the use of traditional banking platforms only and the use of both traditional and fully digital banking platforms together, which have an increasing and a decreasing trend in relation to income bracket, respectively. This supports the findings of Chiu, Bool, & Chiu (2017) and Li et al. (2021) that there may be a stigma surrounding the security and privacy of fully digital banking that would hinder its acceptance in the Philippine market, as many Filipinos are known to be cautious of their monetary assets.

Table 2.1. Preferred bank between Traditional and Fully Digital Banks according to the respondents' generations

Generation	Banking Preference	
	Traditional Banking	Fully Digital Banking
Generation Z	25.71%	12.21%
Millennials	20.00%	13.77%
Generation X	23.12%	5.19%

In this table, traditional and fully digital banking is being compared to appeal to each generation. The three generations, Generation Z, Millennials, and Generation X have shown a clear preference for using traditional banks. With 25.71% of the respondents from Generation Z, 20% from Millennials, and 23.12% for Generation X. The Younger generations' increasing use of online banking options does not indicate a complete disinterest in brick and mortar banks. Corresponding to Chiu, Bool, & Chiu (2017), customer demographics could affect how willing they will be to use mobile banking.

Even though traditional banking gained a large portion of the respondents' preference, analyzing the banking customers' specific transactions is another way of getting an in-depth understanding of what specific transactions customers may look into when engaging with traditional or fully digital banking platforms.

Table 2.2.1. Working Respondents' Specific type of transaction used for Traditional Banks

Type of Transaction	Frequency
<i>Payment of Bills</i>	138
<i>Savings</i>	273
<i>Time Deposit</i>	147
<i>Loan payments</i>	125
<i>Bank transfer</i>	173

Table 2.2.2. Student Respondents' Specific type of transaction used for Traditional Banks

Type of transaction	Frequency
<i>Payment of Bills</i>	113
<i>Savings</i>	225
<i>Time Deposit</i>	112
<i>Loan payments</i>	90
<i>Bank transfer</i>	147

For the working respondents who utilize traditional banks in various transactions, savings and bank transfer topped the choices with 273 and 173 votes, respectively. The results are similar to the student respondents, with 225 for savings and 147 for bank transfer. By looking at a wider perspective, both the students and working respondents who use traditional banking prioritizes savings and bank transfer for their specific transactions, as seen in tables 2.2.1 and 2.2.2.

Table 2.2.3. Working Respondents' Specific type of transaction used for Digital Banks

Type of transaction	Frequency
<i>Payment of Bills</i>	195
<i>Savings</i>	121
<i>Time Deposit</i>	22
<i>Loan payments</i>	22
<i>Bank transfer</i>	204

Table 2.2.4. Student Respondents' Specific type of transaction used for Digital Banks

Type of transaction	Frequency
<i>Payment of Bills</i>	177
<i>Savings</i>	108
<i>Time Deposit</i>	20
<i>Loan payments</i>	17
<i>Bank transfer</i>	188

Tables 2.2.4 and 2.2.3 showcases the respondents' inclination toward specific banking transactions for digital banking platforms. As presented in table 2.2.3, the working respondents prove that bank transfer, payment of bills, and savings as the most utilized activity for digital banks. The same goes with the student respondents, where the three options remained the top priorities when availing of the services of the emerging banking platforms.

Contrary to the respondents' preferences on specific banking transactions for traditional banks, the results for digital banking demonstrates the clear difference between its counterpart. In tables 2.2.1 and 2.2.2, loan payments and time deposits gained a substantial amount compared to digital banking platforms, where it only gained not more than 30 votes from the respondents. This is significantly low against the respondents who use traditional banking with more than 90 votes for the said transactions. With that being said, loans and payment of bills are not prioritized by the respondents who use the services of digital banks. The presented data shows how different types of respondents approach the services of digital and traditional banking platforms with various kinds of services.

Hypothesis 3: Decision Variables determine the preference of metro manila bank customers to retain a preference for traditional banks.

Table 3.1. Factors affecting consumer preference in Traditional Banks (Proximity and Convenience)

Type of Variables	Weighted mean	Std. Deviation	Interpretation
<i>The bank's location is close to the house.</i>	4.14	3.75	Agree
<i>I receive timely updates.</i>	3.70	3.33	Agree
<i>It does not require any equipment for my transactions.</i>	3.81	3.44	Agree
<i>Traditional banking is simpler and faster than new approaches.</i>	3.53	3.19	Agree

Table 3.1 shows the result in Proximity and Convenience for Traditional Banks that affects the decision variable of the respondents. The respondents had scored topmost on the statement: "*The bank's location is close to the house*", with a weighted mean of 4.14 and standard deviation of 2.03, signifying agree, Banks with branches located closest to residential areas have the most significant number of accounts. Large banks are located in highly populated areas because proximity to potential customers will keep those customers loyal. Second, the respondents had opted for the "It does not require any equipment for my transactions" with a weighted mean of 3.81 and standard deviation of 1.95 with a verbal interpretation signifying agree. Third, the statement "I receive timely updates" with a weighted mean of 3.71 and a standard deviation of 1.924. This result proposes that traditional banks still lack and need to improve their service. This correlates with (Tajimi, 2021) that changes in new technologies prompt intense competition. Lastly, "Traditional banking is simpler and faster than new approaches." with a weighted mean of 3.53 and a standard deviation of 3.19. With the advent of new technologies, conventional banking systems can be simplified and made more efficient, although some banking methods should still be kept. According to the data provided, hypothesis 3 is supported by the results, as decision variables determine the preference of metro manila bank customers to retain a preference for traditional banks. This indicates that the traditional banks had been accepted as a form of convenience.

Table 3.2. Factors affecting consumer preference in Traditional Banks (Real-Time Assistance and Direction)

Type of Variables	Weighted mean	Std. Deviation	Interpretation
<i>I like to speak with someone in person about settling my account.</i>	4.33	3.90	Highly Agree
<i>Some branches have inadequate and unavailability of technology.</i>	3.63	3.28	Agree
<i>Bank employees' technical proficiency.</i>	4.23	3.78	Agree

<i>The bank manager and employees keep a friendly and loyal connection with customers.</i>	4.27	3.82	Agree
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Table 3.2. shows the consumer preference in traditional banks regarding real-time assistance and direction. The respondents were particular with the statement: "I like to speak with someone in person about settling my account," with a weighted mean of 4.33 and a standard deviation of 2.08, which went to Highly Agree. This proves that being assisted makes them at ease and convenient for processing documents. Second, the statement: The bank manager and employees keep a friendly and loyal connection with customers with a weighted mean of 4.27 and standard deviation of 2.067, with the hospitality and amiability of the bank manager and employees to keep a friendly and loyal connection with users feel prioritized. According to Chiu, Bool, & Chiu (2017), trust is fundamental to maintaining strong customer relationships. The third is "Bank employees' technical proficiency," with a weighted mean of 4.238 and a standard deviation of 2.05. "Some branches have inadequate, and unavailability of technology" statement gained a weighted mean of 3.63 and a standard deviation of 1.90. Therefore, banks should ensure that each branch is equipped with the most updated machines and programs to foster a sense of importance among consumers. It is aligned with (Christophers, 2018) that traditional banks have a slow pace in improving their banking service. According to this table and the data provided, hypothesis 3 supported: that decision variables affect a consumer's preference for traditional banks over foreign banks.

Table 3.3. Factors affecting consumer preference in Traditional Banks (Stability and Dependability)

Type of Variables	Weighted mean	Std. Deviation	Interpretation
<i>When I'm inside a physical bank, I feel safe and secure.</i>	4.42	3.96	Highly Agree
<i>I can avoid errors during personal financial transactions.</i>	4.23	3.79	Agree
<i>Traditional banks endure larger expenditures than fully digital banks.</i>	4.13	3.70	Agree
<i>Accountability is more evident with a physical branch.</i>	4.33	3.88	Highly Agree

Table 3.3 denotes the factors that affect consumer preference in Traditional Bank's Stability and Dependability. Traditional banks have years of experience and plenty of loyalties with clients. They are well-known in the community and provide more services than online banks. The top statement of the respondents denotes that "When I'm inside a physical bank, I feel safe and secure," with a weighted mean of 4.42 and a standard deviation value of 3.96, signifying to a verbal interpretation of highly agree. It corresponds with (Thakor, 2020) that the security of traditional banks is more evident since there are technological issues digital banks may encounter. Second, the statement "Accountability is more evident with a physical branch", with a weighted mean of 4.33 and a standard deviation of 3.88, agreed that the presence of a physical bank location might serve as a reminder to people that they are accountable to their community. Third, the statement "I can avoid errors during personal financial transactions" with a weighted mean of 4.23. One explanation for this phenomenon is that workers at brick-and-mortar banks can more easily interact with and assess their customers, causing a decrease in financial errors. The data provide strong evidence that making decisions about which variables to include in the model is important for determining whether metro manila bank customers prefer traditional banks.

Table 3.4. Factors affecting consumer preference in fully digital banking (Convenience for Digital Banks)

Type of Variables	Weighted mean	Std. Deviation	Interpretation
<i>I can go to as many banks as I want.</i>	4.15	3.73	Agree
<i>I can save time and focus on other activities.</i>	4.27	3.84	Agree
<i>I don't need to stand in line or visit a branch.</i>	4.38	3.97	Highly Agree

<i>Fully Digital banking provides service 24/7 with fast transactions.</i>	4.20	3.79	Agree
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Table 3.4 denotes the results for the Convenience for Digital Banks connotes that the people have a very high level of satisfaction in terms of the decision variables that they have acquired through fully digital banking. This can indicate that the bank had provided enough convenience to their clients. The respondents considered through the statement "I don't need to stand in line or visit a branch" with a weighted mean of 4.38 and a standard deviation of 3.97. The digital revolution in banking with the availability of online account opening and maintenance has eliminated the need for an in-person visit to a bank. Second, the statement "I can save time and focus on other activities" with a weighted mean of 4.27 and standard deviation of 3.84, and Third, the statement "Fully Digital banking provides service 24/7 with fast transactions" with a weighted mean of 4.20 with a standard deviation of 3.79 and verbal interpretation of Highly Agree. This signifies that the respondents think highly of going fully digital banking. Thus, it is compatible with (Ozili 2018) and Jebarajakirthy and Shankar (2021) that the most significant factor for banking users for fully digital banking is convenience. With this, the data provided shows against hypothesis 3 that decision Variables determine the preference of metro manila bank customers to retain a preference for traditional banks.

Table 3.5. Factors affecting consumer preference in fully digital banking (Ease of Monitoring Financial Activities for Digital Banks)

Type of Variables	Weighted mean	Std. Deviation	Interpretation
<i>It is easy to review and monitor previous transactions when utilizing fully digital banking.</i>	4.31	2.07	Highly Agree
<i>I can obtain transaction proofs in soft copy.</i>	4.29	2.07	Highly Agree
<i>I receive a notification when my transactions are completed/account credited/cheques cleared.</i>	4.28	2.07	Highly Agree
<i>Low fees are required for fully digital banking.</i>	3.90	1.97	Agree

Unlike traditional banks, most digital banks provide simple access to finances through a single dashboard. It provided a way for people to manage their finances in their own homes. Table 3.5 explores the Ease of Monitoring Financial Activities for Digital Banks results. The topmost statement from the respondents mentions that "It is easy to review and monitor previous transactions when utilizing fully digital banking," with a weighted mean of 4.31 and standard deviation of 2.07 with the verbal interpretation of highly agree. To increase transparency, banking systems now make past transactions visible. Fully digital systems allow customers to monitor their accounts and keep track of previous transactions. Second, the statement "I can obtain transaction proofs in soft copy" has a weighted mean of 4.29 and a standard deviation of 2.07. It proves that the accuracy of transactions has become dramatically supported due to its efficiency. Third, the statement "I receive a notification when my transactions are completed/account credited/cheques cleared" with a weighted mean of 4.28 and standard deviation of 2.07, all with a verbal interpretation of highly agree. Lastly, Low fees are required for fully digital banking, which gained a 3.90 weighted mean with a 1.97 standard deviation. The data provided in this table 3.6 runs counter to the theory; hypothesis 3 states that decision variables determine the preference of metro manila bank customers to retain a preference for traditional banks.

Table 3.6. Factors affecting consumer preference in fully digital banking (Security and Safety for Digital Banks)

Type of Variables	Weighted mean	Std. Deviation	Interpretation
<i>Privacy is maintained in fully digital banking.</i>	2.74	2.57	Disagree
<i>I'm at ease since I'm in control of it.</i>	2.91	2.71	Neutral

<i>Because it is simple to use, I feel protected and comfortable.</i>	2.69	2.39	Disagree
<i>I can do it whenever and wherever I want, even in an emergency.</i>	4.18	3.76	Agree

Table 3.6 discusses the results for Security and Safety for Digital Banks. Security and privacy have always been a concern for most people. The top statement amongst the respondents is that through the use of digital banks, “I can do it whenever and wherever I want, even in an emergency.” with a weighted mean of 4.1844 and a standard deviation of 3.76. The digital revolution has enabled customers to access their bank accounts from any location at any time of the day or night. In addition, customers can also transfer funds from one account to another within seconds. While the other preferences have been seen to be neutral in terms of privacy and simplicity to use, and feel protected and comfortable with the fully digital bank. While one statement gained a negative interpretation with the statement “I’m at ease since I’m in control of it.” with a weighted mean of 2.91 and a standard deviation of 2.71. This agrees with (Li et al., 2021) that users are reluctant to use fully digital banking due to its security. However, as the findings indicate, traditional banking seems to have higher perceived security and safety as opposed to fully digital banking, as was detailed in the table. With this, the data provided shows against hypothesis 3 that decision Variables determine the preference of metro manila bank customers to retain a preference for traditional banks.

Hypothesis 4: Metro Manila bank customers who are likely to avail of both types of banking services are geared towards prioritizing fully digital establishments.

Table 4. Comparison of the process provided by fully digital and traditional banks

Type of Bank	Weighted mean	Std. Deviation	Verbal Interpretation
Convenience in terms of speed			
<i>Traditional</i>	3.74	2.28	Satisfied
<i>Fully Digital</i>	4.48	2.82	Highly Satisfied
Banking service in terms of lesser additional costs			
<i>Traditional</i>	4.08	3.63	Satisfied
<i>Fully Digital</i>	3.44	3.11	Satisfied
Convenience in terms of simplicity of the process			
<i>Traditional</i>	3.74	3.32	Satisfied
<i>Fully Digital</i>	4.37	3.89	Highly Satisfied

From the table above, it was found that fully digital banks were rated higher in terms of speed with a weighted mean of 4.48 (standard deviation of 2.82) and simplicity of process with a weighted mean of 4.37 (standard deviation of 3.89), indicating that fully digital banks were considered speedier and having simpler processes as opposed to traditional banks, which had a weighted mean of 3.74 for both speed and simplicity of process (standard deviation of 2.28 and 3.32, respectively) with low variance among the computed weighted means and their individual data points. However, for lesser additional costs, traditional banks were rated higher with a weighted mean of 4.08 (standard deviation of 3.63) as opposed to fully digital banks with a weighted mean of 3.44 (standard deviation of 3.11), indicating that both failed to perform highly satisfactorily in terms of lesser additional costs, but regardless, traditional banks were perceived to have lesser additional costs. The standard deviations here also indicated a relatively low variance among the weighted means and their individual data points.

All these findings go against the fourth hypothesis as the perception of the respondents depends on the particular factor as fully digital banks were seemingly prioritized for their speed and simplicity of process but were not prioritized for lesser additional costs. Notably, it can be found that, as Khurana (2019) had posited; convenience is one of the factors associated with the positive response of consumers to the digital banking platform as it allows banking customers to not have to be physically present to conduct their monetary transactions and efficiency as it allows real-time transfers and checks balances. Moreover, as Malaquias and Hwang (2016) posited, consumers, establish their trust in various mobile banking services if the consumers find value through convenience and, as per Jebarajakirthy and Shankar (2021), convenience is one of the most significant motivators for consumers in terms of digital banking. Being that, as Ozili (2018) had suggested and as the findings suggest, digital banking is more

convenient, the fourth hypothesis is conclusively in the affirmative. However, due to the fact that, as posited by Chiu, Bool, and Chiu (2017), many Filipinos are still wary of using digital banking due to perceived costs and other factors, and the findings indicate that traditional banking still scores higher in terms of lesser additional costs, there may be some hindrances in banking customers prioritizing digital banking.

Table 4.1. Comparison of support provided by fully digital and traditional banks

Type of Bank	Weighted mean	Std. Deviation	Interpretation
Customer service received			
<i>Traditional</i>	4.3	3.86	Satisfied
<i>Fully Digital</i>	3.69	3.27	Highly Satisfied

In terms of the support provided by the respective banking platforms, particularly on the perceived customer service received, traditional banking was rated the highest with a weighted mean of 4.3 (standard deviation of 3.86), resulting in the verbal interpretation of "highly satisfied". As opposed to digital banking which was rated with a weighted mean of 3.69 (standard deviation of 3.27), resulting in the verbal interpretation of "satisfied." In effect, it can be observed that traditional banks were considered to have a better level of customer service compared to fully digital banks. The respective standard deviations are both relatively low, indicating high accuracy for the representation of the individual data points by the respective weighted means.

Notably, these findings directly oppose Parise et al. (2016), which posited that digital banks could use their big data to personalize their platforms better and optimize their services to fulfill their client's needs and wants, thus achieving more customer satisfaction. It also goes against the findings of Frost, Gambacorta, Huang, Shin & Zbinden (2020) that digital banking, as opposed to traditional banking, employs a more user-oriented approach. As indicated by the findings, digital banking failed to provide customer satisfaction through customer service, which is necessary for it to be prioritized over traditional banking, as posited by Anagnostopoulos (2018). With this, the fourth hypothesis is conclusively the negative.

Table 4.2. Comparison of protection features provided by fully digital and traditional banks

Type of Bank	Weighted mean	Std. Deviation	Interpretation
Level of the perceived safety of the transaction			
<i>Traditional</i>	4.49	4.02	Highly Satisfied
<i>Fully Digital</i>	3.61	3.20	Satisfied
Level of perceived accountability			
<i>Traditional</i>	4.40	3.93	Highly Satisfied
<i>Fully Digital</i>	3.68	3.27	Satisfied
Timeliness of notification for the transactions/anomalies			
<i>Traditional</i>	3.35	3.18	Satisfied
<i>Fully Digital</i>	4.19	3.73	Highly Satisfied

From the table above, it can be seen that traditional banks are perceived to be safer than fully digital banks in terms of the perceived safety of transaction and level of perceived accountability, with a weighted mean of 4.49 and 4.40, respectively (standard deviation of 4.02 and 3.27, respectively). However, fully digital banking was rated higher for timeliness of notification for transactions/anomalies with a weighted mean of 4.19 (standard deviation of 3.73) as opposed to traditional bank with a weighted mean of 3.35 (standard deviation of 3.18), indicating low variance among the respective individual data points and their computed weighted mean score.

These results confirm the findings of Thakor (2020), which found that traditional banks are more known for security for being substantially more reliable as digital banks are more at risk of technical problems due to their reliance on technology as well as digital banks' substantial security risks for relying on cloud computing, a centralized system that allows the delivery of services to be facilitated online (e.g., cloud storage), to process financial transactions, which could cause thousands and thousands of users to lose access to their accounts and potentially their funds if hacked and the difficulty to bypass the encryption in a hacking case, resulting in a long processing time to remedy the situation. As the findings indicate, traditional banking seems to have higher perceived protection and security as opposed to fully banking, as was detailed above.

Table 4.3. Specific Transactions used in Traditional Banks

Specific transaction	Frequency
<i>Payment of Bills</i>	60
<i>Savings</i>	145
<i>Time Deposit</i>	93
<i>Loan payments</i>	77
<i>Bank transfer</i>	84

The table above shows that traditional banking is often used for savings with 145 respondents, followed by time deposits and bank transfers with 93 and 84, respectively. It is less used for payment of bills and loan payments with 60 and 77, respectively. This may be due to the fact that Filipinos are known to be cautious of their monetary assets and owed to the stigma surrounding the security and privacy of fully digital banking, as discussed by Chiu, Bool, & Chiu (2017) and Li et al. (2021). Most would entrust their savings to traditional banks over digital banks, as was posited by Morgan & Hunt (1994) in the commitment trust theory, which states that consumers need to trust the bank because they are entrusting their savings.

As the findings indicate, traditional banks are used for 459 instances, 38 instances less than fully digital banking, which garnered 497 instances, thus showing a higher proclivity to use fully digital banking for such transactions. However, traditional banking is used more for savings, time deposits, and loan payments as opposed to fully digital banking, but is used significantly less for payment of bills and bank transfers. Thus, there are certain instances when traditional banking is prioritized over fully digital banking, but overall, since the total instances of savings, time deposit, and loan payments are only 315 for traditional banking as opposed to payment of bills and bank transfers which are 356 for fully digital banking, fully digital banking is still prioritized in the general sense over traditional banking.

Table 4.4. Specific Transactions used in Digital Banks

Specific transaction	Frequency
<i>Payment of Bills</i>	174
<i>Savings</i>	102
<i>Time Deposit</i>	19
<i>Loan payments</i>	20
<i>Bank transfer</i>	182

The table above shows that fully digital banking is often used for bank transfers with 182 respondents, followed by payment of bills and savings with 174 and 102, respectively. It is less used for payment of time deposits and loan payments with 19 and 20, respectively. This may be due to the fact that fully digital banking has been rated higher for its speed and convenience in terms of simplicity of the process, and as per Ozili (2018), which found that fully digital banking has the edge over traditional banking as it is known for being more convenient as it eliminates the need to travel to banks to facilitate their financial transactions physically.

As the findings indicate, digital banks are used for 497 instances, 38 instances more than traditional banking, which garnered 459 instances, thus showing a higher proclivity to use fully digital banking for such transactions. Fully digital banking is used more for payment of bills and bank transfers, most likely due to its convenience and efficiency as opposed to traditional banking, but is used significantly less for savings, time deposits, and loans payments, most likely due to the stigma surrounding its security and customer service. Thus, as has been discussed above, there are certain instances when traditional banking is prioritized over fully digital banking, but overall, since the total instances of savings, time deposit, and loan payments are only 315 for traditional banking as opposed to payment of bills and bank transfers which are 356 for fully digital banking, digital banking is still prioritized in the general sense over traditional banking.

5. Conclusion

The dominance of traditional banks indicates a resistance against fully digital banks that are currently existing in the country. Despite having a high volume of smartphone users in the Philippines, traditional banks still prevail as the type of banking platform preferred by most banking customers. However, this claim does not disregard the competitive advantages of fully digital banks that appeal to the users. With the fact that decision variables and demographic status may affect one's approach in choosing which banking platform to use, financial literacy and bank's marketing and communication efforts play an integral role in shaping the Philippines' current banking industry. By taking into consideration the results yielded in this study, understanding customer

preference and motivation is an essential part of conducting rigorous research and development initiatives in order to adjust services based on how customers would value specific aspects of fully digital banking transactions. Even though traditional banks lack in various aspects such as quickness of transaction, availability, and simplicity of process when compared to fully digital banks, security, privacy, and reliability are some of the factors that appeal more to customers than efficiency and convenience alone due to the fact that they have a negative perception of fully digital banks' security, accountability, and customer service. These two factors are highly important in order to mitigate the gap between customer perception and fully digital banking platforms. Without giving a substantial amount of marketing efforts to inform and reassure banking customers and delivering minimal to no improvements to certain factors such as security, customer service, and accountability, fully digital banks will not be able to compete with established traditional banking institutions and remove the resistance among Philippine banking customers.

5.1 Limitations

Understanding customers' banking preferences are complicated, and one study could only capture a concentrated approach in order to yield accurate and reliable results. The goal of this research is to be able to compare and take a deeper look at what banking platform they prefer and how they choose it. In order to have a more comprehensive approach to this matter, new studies should be able to tackle specific bank companies and how significant this factor could be when understanding customer behavior. Due to time constraints, the study was only able to capture a concentrated sample size, and the researchers focused on gathering data from banking consumers only online through the use of Google Forms. In achieving a fresh approach to this topic, the limitations mentioned could be a point of interest for new researchers. Customer preferences change through time and the limitations of this research as well as the gap in the industry could be mitigated through the integration of specific banking brands and also understanding the company's current perspective regarding the current trend in customer behavior.

5.2 Directions for Future Study

The results and insights gathered can be a starting point for new research interests in the field of banking and finance. As the Philippine banking industry and its services grow further, new and, untapped topics have yet to be examined by future researchers. Some prominent points of inquiry are as follows:

1. Financial Intermediaries - The conceptual framework of the study is suggested to be utilized and expanded to include Financial Service Intermediaries (FIS), which may include GCash, PayPal, PayMaya, Squid Pay, Beep, and other existing as well as emerging FIS.
2. Mobile and Internet Platforms - With the rise of technology, both traditional and banking platforms have been utilizing mobile and internet banking to cater to their customers. Future studies could delve deeper into the effectiveness of this technology and service and how it could affect an individual's overall banking experience. This could also lead to the discovery of new approaches to the development of applications and technological services.
3. Adoption of Digital Currency - According to Statista (2022), the Philippines is one of the leading countries when it comes to cryptocurrency adoption. In line with its emergence and acceptance by individual investors, cryptocurrency could also be an interesting variable to expand the study in relation to both traditional and fully digital banking platforms having banking institutions as the primary respondents.

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