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Factors in Usage of Digital Financial Services Towards Satisfaction and Retention in Metro Manila Philippines

Earl Denzel D. Tan^{1*}, Marinor G. Quintilla¹

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ABSTRACT

The advent of COVID-19 in CY2020 paved the way for digital financial services (DFS) in the Philippines to prosper and be accepted by many Filipinos. DFS continued to expand up to these days, gradually replacing traditional banking services through innovative technologies. Despite the fast technological advancement and several studies on customer adoption, there is continuous lack of empirical evidence on electronic service quality (E-SERVQUAL) factors that influence clients' usage of DFS which plays a pivotal role for optimum digitization specifically banks. This study aimed to investigate E-SERVQUAL factors that influence client's usage of DFS provided by digital banks, traditional banks and electronic money issuers (EMIs). The study employed quantitative and descriptive correlational research design in interpreting the relationship of the variables. Further, the researcher used a self-structured survey questionnaire in gathering primary data from 392 users of DFS. Results showed that efficiency, security and reliability are significant predictors of satisfaction in using DFS. In addition, highly satisfied clients using DFS will likely result to retention of accounts with 57.40% who agreed and 35.70% who strongly agreed. Moreover, there is a need for the government to improve or create new laws that will increase security of DFS. Improving E-SERVQUAL of DFS will increase retention of clients' usage of DFS. Increasing security through improved or new governmental laws will likely result to increased usage, satisfaction and retention of DFS. The study showed valuable contribution among the limited literature on E-SERVQUAL that influence satisfaction and retention of DFS usage.

INTRODUCTION

Over the past years, the financial sector had continuously evolved, resulted in the system improvement and expansion of financial institutions. In 1985 the Bank of Scotland offered the world's first Home and Office Banking Services (HOBS), where clients could manage their accounts in the comfort of their homes using their television and telephone link-up. October 1994 marked the first online banking services through the World Wide Web (WWW) by Stanford Federal Credit Union. Since the first online banking services that Stanford Federal Credit Union launched, internet banking has started to spread, and more people have started to use the service (UBS, 2022). UBS (2022) added that the 2007 iPhone launch, accelerated mobile banking development, facilitated and simplified the accessibility of banking services through smartphones.

Due to the escalated growth in mobile internet accessibility, the usage of digital financial services (DFS) improved and continued to increase particularly in developed countries. DFS differs from one country due to various factors such as regulations, social, cultural environment and market structure.

In the Philippines, companies particularly the banking industry had gradually shifted from traditional banking services to digital banking platforms. Digital financial services (DFS) are services offered by financial institutions such as digital banks or known as branchless

banks, traditional banks and electronic money issuers (EMIs). They rely on digital technology to facilitate daily financial transactions of users inexpensively, conveniently and cashless through smartphones and other electronic gadgets. In addition, with the significant reduction of physical contact due to the COVID-19 pandemic, digital financial services were amplified since they enabled users to make financial transactions online without the need to physically go to a branch (Pazarbasioglu *et al.*, 2020). The expansion of digital financial services during the COVID-19 pandemic catalyzed access to banking accounts through financial inclusion efforts of different governments worldwide. Globally as of 2021, 76% of adults had maintained bank accounts, electronic money accounts, and other financial accounts, from 68% in 2017 and 51% in 2011 (The World Bank, 2022). The increased accessibility to bank accounts from digital banks, electronic money issuers (EMIs), and traditional banks had directly escalated the digital usage for payments, savings, and borrowings. According to the World Bank (2022), adults globally who made their first online payments after the emergence of the COVID-19 pandemic rose to more than 40%, excluding China, 50% saved formally at a financial institution, and 53% borrowed money.

In the United States, digital payment usage of two or more methods rose from 45% in 2019 to 58% in 2020, while the African government used digital payments to disseminate stimulus funds (McKinsey & Company, December 2021).

¹ University of Santo Tomas, Philippines

* Corresponding author's e-mail: earldenzel.tan.gs@ust.edu.ph

Also, digitally active clients in emerging Asia, namely; China, India, Indonesia, Malaysia, Myanmar, Philippines, Thailand, and Vietnam, rose from 12% to 25%, with 30% to 50% of non-digital banking users expressed to switch to digital (Barquin *et al.*, 2018). In the third quarter of 2021, there are 7.6 million digital accounts recorded in the Philippines, which is 23.6% from 2020 the same quarter, and 138.8 million electronic money accounts as of the third quarter of 2020, with a growth of 120.0% as against 2019 of the same quarter (Bangko Sentral ng Pilipinas, 2021).

ASEAN region enjoyed privileges and benefits from the said use of new technology (Ramadhan, 2020). One example of the usage of digital financial service is the use of online transport such as Grab. Hence, digital trade had improved ASEAN's economic growth and had made Southeast Asia a digital hub that can generate more income. However, non-traditional threats such as cyberattacks are the result of this modern world (Ramadhan, 2020). Cyberattacks main purpose is to pull down the escalated economic impact of digital services in the ASEAN region. The lack of rigorous regulations and a major technological gap among ASEAN members are the biggest challenge to strengthen cyber security in Southeast Asia (Ramadhan, 2020). Despite this trade-off, the International Monetary Fund (IMF) predicted that Southeast Asia will receive \$2.8 trillion from e-commerce alone (Feng, 2018).

In the Philippines, the market demand for digital banking services had increased tremendously from the start of COVID-19 pandemic up to these days and has already been part of the "new" norm. Providers for the new innovations included both financial and non-financial institutions which are leveraging on digital channels to offer basic financing services at greater convenience and lower cost. Financial institutions include traditional banks and digital banks or known as the branchless banks. The former had been continuously adapting to the demands of its clients, especially in digitalizing the traditional banking systems in which clients are more familiar with while the latter had already penetrated the Philippine digital banking market. Moreover, the rise of the new non-banking entrants is also providing DFS platforms such as e-money issuers (EMIs).

EMIs and digital banks had started to partake in clients' digital financial service demands (Gigante *et al.*, 2022). Abbasi and Weigand (2017) supports this idea by suggesting that this market demand encouraged financial institutions, software houses and other service providers to offer advanced digital banking services to retain their existing clients and be able to tap the unbanked population.

As more of the population shifted to digital financial services; traditional banks, digital banks, EMIs, and other online banking platforms had a high potential to stay and continuously change the face of the financial industry. Since the start of the digitalization of banking services, user experience or client experience had been emphasized

rather than quality clientele relationships (Jerenz, 2022). The client experience is similar to a journey through company touch points such as convenience, online functional elements, core service, value, service process, and online aesthetics. In addition, client experience is the perception of digital financial services in terms of use, service quality, security, and accessibility (Handro, 2018). To gain an optimum digitization, there are three key ingredients that need to be satisfied, namely: technological advancement, customer affinity or better known as customer awareness to use and customer satisfaction. There were several studies on the adoption of digital financial services through traditional banks, digital banks or EMIs. However, there is a lack of empirical evidence related to the electronic service quality (E-SERVQUAL) factors that influence clients' usage of digital financial services leading to their satisfaction. Hence, this paper is a valuable contribution to the existing literature on the above-mentioned issue on DFS.

Results of this study will enable the bank regulators to further improve the e-service quality of the digital financial services in the Philippines as well as crafting rigorous regulations by the government in collaboration among the ASEAN members that will counter fight the non-traditional threats that will further yield to increase the retention level of clients' in DFS usage.

Research Problem

The lack of empirical evidence related to the e-quality service factors that influences the clients' usage of digital financial services leading to their retention is the gap that the researcher would like to address in this paper. The study aims to investigate the influence of E-SERVQUAL factors in clients' usage of digital financial services leading to their satisfaction and retention. Moreover, the study will evaluate the satisfaction level of clients based on their experiences in using digital financial services of financial institutions as well as the EMIs. Further, it will assess the influence of E-SERVQUAL factors (security, reliability, efficiency, and ease of use) among digital banks, electronic money issuers (EMIs) and online platforms of the top five private universal banks in the Philippines. Since digital financial services (DFS) operate mainly through online platforms or mobile applications, better service qualities such as efficiency, ease of use, security, and reliability are necessary to retain clients. Service quality of digital financial services has a positive correlation with the intention of use, and improvements such as responsibility, reliability, assurance, and empathy are a necessity (Kanokkarn & Tipparat, 2018). Kanokkarn and Tipparat (2018) also added that usage of digital financial services is directly influenced by clients' perceived risk, trust, and security due to fraud, data breach, and theft risks.

Significance of the Study

The global trend of financial institutions is geared towards digitalization. As a member of the ASEAN region, the Philippines is fastly growing into a digital hub that can

elicit economic growth. The key to optimal digitization should match the technological advancement coupled with customer awareness of use and their satisfaction level, leading them to retain their usage of DFS. Hence, in order to sustain the use of DFS, we need to explore the E-SERVQUAL factors that influence the clients' continuous usage of such platforms.

Literature on customer awareness in adopting DFS were numerous but a dearth of literature on the e-service quality factors that influences the clients' usage of digital financial services leading to satisfaction and retention due to differences in regulations, cultural and social environment and market structure of various countries. Hence, this paper will serve as a pioneering study in such field in the Philippines. The intent of the current study is to fill in the said research gap.

Review of Related Literature

This section presents what digital financial service is and what factors affect the satisfaction level of bank clients leading to their retention on using these services. Further, this section provides a review of the literature about the service qualities that significantly impact client satisfaction and retention.

Factors in Clients' Usage of Digital Financial Services

Quality either in products or services is an important factor to any organization. Quality can be defined as the features and characteristics of any product or service that has the ability to satisfy customer needs (Kotler *et al.*, 2021). Service quality is also a difficult task to achieve since it is relative to the client's point of view if their needs or concerns are provided with satisfactory solutions (Shayestehfar, & Yazdani, 2018). According to Sleimi *et al.* (2020), there are six major dimensions to service quality which are reliability, service portfolio, tangibles, price, access, assurance and effectiveness.

However recent studies suggests that efficiency, ease of use, security and reliability has the most significant impact on client satisfaction. One study shows that reliability, responsiveness, assurance, empathy and tangibility have significant influence on client satisfaction (Khan *et al.*, 2018). Another study shows that reliability and ease of use of digital financial services has significant impact on client satisfaction (Ketema & Selassie, 2020). Moreover, a recent study on digital financial services indicates that efficiency, ease of use, security and reliability have significant impact on client satisfaction (Egala *et al.*, 2021). The researcher will be focusing on the said four variables to determine their influence on the clients' satisfaction in the Philippine setting.

Efficiency

Efficiency is defined as how quick the digital financial service responds to client financial transactions. In the client's perspective, it is how fast and timely the digital financial service can process client demands such as; bills payments, fund transfers, and other financial transactions.

It is one of the determining factors in client satisfaction since it is how digital financial service perform in terms of the requested financial transaction by the user. Hammoud *et al.* (2018) showed that efficiency increases client satisfaction of digital financial services. In addition, Raza *et al.* (2020) explained that the greater the efficiency of the digital financial service the more satisfied are its clients. Therefore, the efficiency provided by the digital financial service in terms of quick account funding, undisrupted bills payment service, and smooth fund transfers are some of the expectations of clients. Meeting client expectations of efficiency might result to increased satisfaction and retention of the financial institutions. In the Philippines, millennials who is always on the go lifestyle patronize DFS often due to its fast services. This has been corroborated in the results.

Ease of Use

Ease of use is the clients' perspective on the ease of using a digital financial product or service. It is when clients are able to easily learn the functions of digital financial services and make financial transactions effortless. In other terms, it defines how a digital application such as digital financial service are user friendly to clients. In addition, it is the level of confidence that technology or system can be easily used and problem free by clients (Purwati *et al.*, 2020).

Ease of use is one of the determining factors for using digital financial services and affects client attitude towards the service. Banu *et al.* (2019) explained that it is indirectly affecting client satisfaction through perceive usefulness of digital financial service. However, more recent studies show that it has a direct significant influence on client satisfaction (Ketema, & Selassie, 2020; Egala *et al.*, 2021). Moreover, Al-Ghraibah (2020) claimed that it has direct positive significance on client retention. Therefore, ease of using the digital financial service in terms of navigation, comfort in processing financial transaction, and digitally opening and closing an account are some of the features that will have importance in satisfying clients of financial institutions. Improving and continuously developing these services may result in an increased satisfaction and retention.

Security

The increased dependency on digital technology did not only create opportunities for different industries but also created risks on security such as cyber-attacks. According to Haq, and Awan (2020) secure electronic banking platforms are important to clients. Also, recent research showed a positive relationship between security and satisfaction (Karim *et al.*, 2022). Moreover, Markopoulou (2021) states that there is an increase in digital security risks and becomes an important issue at a global scale with the increased digital usage. In addition, the cost of cyber-attacks is high that it can result to financial losses and loss of positive brand reputation.

Security is referred to the extent of protection a service

provider can guarantee on the safety of client personal information and financial transactions. Since digital financial services are banking services without face-to-face interactions, it poses security risks on financial transactions and privacy of personal information due to the constant cyberattacks and threat of data breach (Shankar & Jebarajakirthy, 2018; Wadesango & Magaya, 2020). Depusoy *et al.* (2020) stated that banks are making sure that financial and personal information of clients are safe through various process that reduce risk of unauthorized access or intrusion. One of the actions taken by digital financial services is to add an extra layer of security or a multi-factor authentication (MFA). MFA is a security strategy added to existing security features that is used to validate the client's identity through combinations of passwords, security codes or biometrics (Qawasmeh *et al.*, 2021). Another solution to cybersecurity is cyber insurance which provides companies and individuals a safety net beside investments on cyber security and cyber resilience. Cyber insurance allows companies and individuals to transfer a portion of financial exposure from cyber threats (Markopoulou, 2021). Ramadhan (2020) examined the building of cybersecurity especially in the Southeast Asia. His results showed that ASEAN countries need to issue stringent policies to regulate cyber threats. He explained that with Southeast Asia becoming a growing digital hub, it has also drawn an escalating effect on a country's economy. Literature on this matter is scant; hence, the need to prepare precautionary measures to combat cyber threat is a must for all ASEAN countries including the Philippines. This current study addresses the gap on the literature with regards to challenges in the usage of digital financial services of clients. Specifically, the three forms of cyber threats, namely: intelligence gathering, hacking and cyber warfare, will be explored. In the Philippines, intelligence gathering and hacking are the two common issues of the clients of digital financial service.

Reliability

Reliability is about the capability of the bank to provide consistent performance of digital financial service without error. In addition, it is the ability of banks to perform and deliver promised services effectively with standardized and simplified processes (Khan *et al.*, 2018; Eke & Singhry, 2020; Talavera, 2020). Moreover, it is essential in digital financial services as timely processing of banking transactions without errors are important to clients (Haq & Awan, 2020).

Acopiado *et al.* (2022) ascribes adoption of digital payment methods as one of the business continuity plans under the "new normal" allowing seamless financial transactions. Cabanillas *et al.* (2016) added that payment systems are significant in the economy since they allow continuous cash flow for both businesses and consumers. Further, digital payment methods are also a major tool for financial inclusion initiatives, especially in low-income countries, considering their potential to

reach the unbanked population (Leng *et al.*, 2018; Sahi *et al.*, 2021; Vashistha *et al.*, 2019). In the Philippines, the BSP's current digital payment initiatives are connected to its financial inclusion objectives of 70% Filipino adult with financial accounts by 2023 ("BSP Aims to Meet its Financial Inclusion", 2022).

With the increased adoption of digitalization in the Philippines, the reliability of digital financial services is an important factor that financial institutions have to look into. It is one of the factors that can affect satisfaction of client. According to Khan *et al.* (2018), it is vital in the overall client satisfaction of digital financial services and by increasing service reliability, satisfaction of clients is increased. Egala *et al.* (2021) supported this by stating that reliability has a significant impact on client satisfaction.

Digital Financial Services

The Bangko Sentral ng Pilipinas vision for the Philippine banking system is to be able to adapt the global central banking standards and have a better digital landscape that is sustainable yielding economic growth. Hence, it has continuously made efforts to improve the digital financial services and expand financial inclusion initiatives in the country, marking the period of digital transformation. The age of information technology and the rise of digital banks, the financial sector is compelled to adapt the digitalization of banking services (Piatos, 2022). The Philippine financial sector also saw technology as an opportunity to improve its client services through digital financial services. Digitalization of banking services catalyzed by the COVID-19 pandemic enabled banks to extend their reach of clients. For example, mobile banking applications can reach the unbanked population with improved client experience through 24/7 services and reduced waiting time for existing clients (Zhang *et al.*, 2018).

Digital financial services are banking services that rely entirely on digital technology to facilitate clients' financial transactions anywhere and anytime using smartphones, computers, and other digital devices. These services are only limited to banking services accessible through the Internet, such as; mobile banking, internet banking, electronic fund transfers, and electronic clearing services, which are delivered through technology (Sardana & Singhania, 2018). In addition, digital financial services are financial services offered by financial institutions through financial technologies (fintech), such as digital platforms, mobile applications, and digital ledger technologies (Agur *et al.*, 2020). Abbasi and Weigand (2017) affirmed previous studies that digital financial services (DFS) has expanded the delivery of transitional banking services through innovative technologies such as internet banking, mobile-phone-enabled solutions, electronic money models and digital payment platforms.

Digital banks are the most recent classification of financial institutions wherein the end-to-end process of account opening, account closure, financial transactions, and many more are done through a digital platform or electronic

channel. These banks have neither physical branches, sub-branches, nor branch-lite units. However, they rely entirely on digital infrastructures through financial technologies (FinTech) to cover all financial transactions (Windasari *et al.*, 2022). Digital banks are difficult to distinguish from traditional banks' digital financial services since the term has been used interchangeably with mobile banking and internet banking. However, the most distinguishing characteristic of a digital bank is its entirely virtual operations that makes account opening and financial transactions convenient (Shin, 2021). Also, digital banks are able to reduce service costs from services carried out by universal banks in branches (Fathima, 2020). In addition, the capitalization requirement of establishing a digital bank is Php1.0 billion as against the minimum capitalization requirement of traditional banks at Php3.0 billion (Bangko Sentral ng Pilipinas, 2020).

Traditional banks, like universal banks and commercial banks, are financial institutions that offer products and services through physical branches, sub-branches, or branch-lite units. In addition to their physical presence nationwide, traditional banks have automated teller machines (ATMs), and service is done with physical interactions. Moreover, traditional banks can receive cash deposits, cash withdrawals, and relationship management (Chiorazzo *et al.*, 2018). Due to the increased demand and heightened competition with digital banks, traditional banks saw an opportunity by offering digital financial services. Traditional banks were able to increase satisfaction of clients through reduced waiting time in the branch while improving their profitability (Garzaro *et al.*, 2020). Although, the digital financial services offered by traditional banks are limited to only processing financial transactions such as account monitoring, fund transfers, and payments (Khan & Alhumoudi, 2022).

Electronic money issuers (EMIs) are financial institutions that can either be banks or non-banks and offers electronically stored money. Electronic money (E-money) issued by EMIs is stored via e-wallets, cash cards, and other similar products accessible through mobile phones and other digital platforms. However, e-money accounts are not considered deposits as they are not insured by the Philippine Deposit Insurance Corporation (PDIC) and are non-interest bearing (Bangko Sentral ng Pilipinas, 2020). In addition, according to the Bangko Sentral ng Pilipinas (2020) e-money accounts have a maximum aggregate balance of P100,000.00 per account holder.

Client Satisfaction

Satisfaction is defined as the feeling of pleasure or disappointment resulting from comparing perceived performance to expectation (Kotler *et al.*, 2021). Client satisfaction with using digital financial services is attributed to the actual and expected performance of digital platforms. The satisfaction of clients reflects how much they like or dislike their actual experience and attainment of their expectations (Cahaya & Siswanti, 2020; De Leon *et al.*, 2020).

Client satisfaction is the response of clients between their expectations and experience of the service performance. In general, clients have certain levels of expectation for any service or product in the market. From the banks' point of view, satisfying clients means meeting their expectations of the service or product being availed.

Meeting clients' expectations will eventually lead to satisfied clients, while the opposite leads to dissatisfaction (Alwi *et al.*, 2019; Kaur *et al.*, 2021). A satisfied client will give financial benefits such as positive word of mouth, client loyalty, and sustainable profit (El-Adly, 2019). Satisfaction of clients mostly depends on the quality of the product or service, such as tangibles, responsiveness, reliability, ease of use, efficiency, and trust provided by companies. According to Zouari and Abdelhedi (2021), satisfaction is sensitive to the level of quality in any industry that provides a service, including financial institutions. Moreover, the quality of banking services is integral to overall client satisfaction and is impacted by facility performance (Raza *et al.*, 2020). Due to limited study of the E-SERVQUAL factors that influences clients' usage of DFS in the Philippines, the researcher thought of this study to address the gap and be able to make a valuable contribution to improve the DFS in the Philippines. Moreover, through this study was able to identify the foremost concern of the clients in DFS usage posed by the clients and that will be addressed by the regulators.

Theoretical Framework

This study is anchored on various theories; namely: outside-in and inside-out theory, cognitive motivational relational (CMR) Theory and Exit, Voice, and Loyalty Theory.

Outside-in and Inside-out Theory by Joan N. Berzoff, Laura Melano Flanagan and Patricia Hertz (2002)

This theory is used if the focus of the organization are their customers. It begins with the new products and services development (i.e., value propositions) or improving existing ones in the wants, needs, and priorities of clients. In management literature, outside-in and inside-out orientations have been used to define a strategy, marketing capabilities, and branding (Day, 1994; Greenley *et al.*, 2005; Hooley *et al.*, 2001; Saeed *et al.*, 2015).

Mental models start from an internal (firm) or external (market) starting point. In the inside-out approach, strategic talks focus on the current resources, products, assets and capabilities of the organization. The unique resources and assets of the company are first identified by executives, who then look for potential markets and exploitation strategies (Hooley *et al.*, 2001). Based on their knowledge of the current organizational competencies, they choose which core business or product category to focus on (Payne *et al.*, 2008). They put a lot of effort into maximizing market share, enhancing productivity, and exploiting present assets.

Inside-out decisions encompass technology development,

cost management, human resources, and financial management (Day, 1994; Hooley *et al.*, 2001; Greenley *et al.*, 2005). On the other hand, the market is the starting point for an outside-in approach to corporate strategy, in contrast. In this scenario, executives start by analyzing how consumer needs are evolving, how rivals are acting, and how the firm's customers view its value propositions (Day & Moorman, 2013). Using this data, the company develops new skills and value propositions and anticipates changes in the market (Day & Moorman, 2010). Additionally, this approach holds that the firm's interactions with market actors lead to the development of valuable assets (Day, 1994; Greenley *et al.*, 2005; Hooley *et al.*, 2001; Hult & Ketchen, 2001; Saeed *et al.*, 2015). Therefore, CEOs should build, safeguard, and use their brands as well as market data and customer and channel relationships as significant assets (Day & Moorman, 2010).

A solid comprehension of clients, their demands (both explicit and implicit), and value-creating processes, are important to the firm's performance (Payne *et al.*, 2008; Saeed *et al.*, 2015). These market insights enable firms to probe far into market trends and exploit them (Day & Moorman, 2010). With this strategy, any "silo" is disregarded while customers are actively listened to and even the lines between suppliers and customers are challenged (Payne *et al.*, 2008) strategies used by the organization. Processes of innovation may even be opened to outside parties (Day, 2011).

The proponent is anchoring his study on this theory since the outside-in train of thought starts consistently at the customer and flows back to the organization. The digital financial service in other countries started prior to COVID 19 pandemic but was accepted only during the heightened times of the said pandemic due to social distancing protocols. The need to access the personal account of clients at the comfort of their home at a least cost were the driving force for the birth of the digital financial service. Client or client perception is the focus of this theory. The challenges faced by the clients' in using the digital financial services will help improve the quality of digital financial services. In this way, the banking sector must experience being a client-client to identify the issues or concerns needed to satisfy and retain the client. Thus, this theory, the outside-in thinking maybe applied.

Cognitive Motivational Relational (CMR) Theory by Richard S. Lazarus (1991)

Cognitive motivational relational (CMR) theory suggests that cognitive evaluation is associated with emotional response. According to Gill *et al.* (2021), CMR theory is the link between the mental evaluation of a person based on beliefs and values and the behavioral outcome which is the response based on stimulated emotions through cognition. It underpins the association between electronic service qualities (E-SERVQUAL) of digital financial services and retention of clients.

The E-SERVQUAL of digital financial services can

be associated with mental or cognitive evaluation where clients perceive its value that results to the client's behavioral outcome or emotional response to retain relationship with the digital financial service of the financial institution they are employing. Shankar and Jebarajakirthy (2018) states that service quality is perceived as the cognitive evaluation of services while client retention is perceived as the emotional response. In addition, the link between customer utilization of digital financial services and their happiness is supported by the cognitive motivational relational (CMR) theory. CMR hypothesizes a connection between mental assessment and behavioral results. According to cognitive theory, a person's evaluation of a given phenomenon is based on their ideas and values, and their response is dependent on the emotions that are sparked by their cognition (Yaseen & El Qirem, 2018).

Applying this theory in this study, the goal of this paper is to evaluate the digital financial services providers and how it influences the satisfaction level of its clients using the E-SERVQUAL factors. The key to optimal digitization aside from technological advancement and customer awareness include customer satisfaction.

When the needs of the customers are satisfied, loyalty and retention increase; thereby, increasing profit and sustainability of DFS.

Exit, Voice, and Loyalty (EVL) Theory by Albert O. Hirschman (1970)

Exit, voice, and loyalty (EVL) theory has been widely adapted in the study of consumer behavior responses (Alexander & Samuel, 2015). It suggests that exit is the response to dissatisfaction, shown through a break of relationship with the digital financial service provided by financial institutions. Voice according to the EVL theory is the constructive verbal response with the expectation that the financial institution would resolve the issue or improve the service provided. The theory hypothesizes that the value of voicing out complaints is the probability that the complaint will be successful and the ability to take up the complaint making the exit as the last resort (Alexander & Samuel, 2015).

Additionally, in this model, customers who are dissatisfied with a product on the market could, for instance, voice their concerns to the producer about deteriorating quality or wait idly for the product to get better (loyalty) rather than acquiring a competing good or service (exit). Voters who disagree with their party's policies in politics might switch parties (exit), participate in party caucuses to influence those policies (voice) or remain loyal in the hope that the party platform will be changed (loyalty). And in an abusive interpersonal situation, one can leave (exit), complain (voice), or avoid confrontation in the hope that the storm will pass (loyalty).

If extremely distinct sorts of behaviors may effectively replace one another, it is impossible to analyze each one separately without leaving out an important detail. Without taking into account the options to depart, such

as buying a different product or moving to a different place, voice behaviors like complaining to the city council or submitting consumer complaints, for example, cannot be comprehended. Hirschman also shows that opportunities to engage in one type of action frequently affect—and in sometimes very unexpected ways—the efficacy of other behaviors. For instance, depending on who is leaving, when it happens, and how it affects people making decisions about their products, services, or policies, the fear of withdrawal may compel declining

enterprises, organizations, and nations to pay more or less attention to voice.

The proponent espouses this theory since it focuses on the proper listening to feedbacks. One of the keys to optimal digitization is customer satisfaction. Listening to their needs will be done thru survey questionnaire. The results thereof will be evaluated. The output of this paper is geared towards clients' satisfaction which will help retain the usage of clients on the DFS platforms. It will solve the issues and concerns of clients.

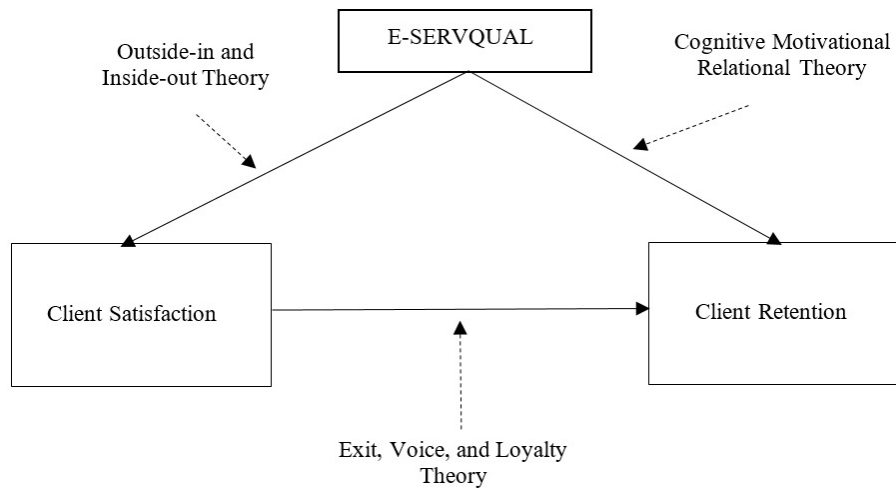


Figure 1: Theoretical Framework

Hypotheses of the Study

The study will test the following null hypotheses to assess the service quality of digital financial services of banks:

H01: Efficiency has no significant influence on client satisfaction

H02: Ease of use has no significant influence on client satisfaction

H03: Security has no significant influence on client satisfaction

H04: Reliability has no significant influence on client satisfaction

MATERIALS AND METHODS

Data Gathering Procedure

The survey questionnaire will be executed online using google forms. The survey questionnaire will be disseminated by general posting through social media accounts such as Facebook messenger and LinkedIn. A filter question is in place to be able to identify if respondent is indeed qualified for the research data gathering.

Pilot Testing Validation

The survey instrument has been validated by two experts who confirmed the quality of the questionnaire with implemented recommendations. Subsequently, pre-testing of the questionnaire with 20-30 respondents will be conducted to validate the effectiveness during

the actual collection of information from respondents. The procedure will ensure that the questionnaires are understandable and articulate to the respondents. Cronbach Alpha will be employed to test the reliability and internal consistency of the questions.

Statistical Treatment of Data

Overall, the data analysis plan for the study involves performing exploratory factor analysis to identify latent subfactors in service quality (E-SERVQUAL) that potentially drive impact to customer satisfaction and retention with online banking and finance applications. After measuring these latent factors, their effects on customer satisfaction and retention will be analysed through logistic regression analysis. The following is a brief description of these methodologies, with key explanations of the models that are useful for the thesis.

Structural Equations Modeling

The primary analysis in the study is conducted through Structural Equation Modeling (SEM), a comprehensive statistical technique used to measure relationships between latent factors and observed items (Hair *et al.*, 2017). Latent factors represent abstract constructs that are not directly measurable but are inferred from a set of observed variables. In this case, SEM is applied to measure the latent factors in the ESERVQUAL framework, which evaluates the quality of digital financial

services through customer perceptions. The latent factors derived from this framework include Efficiency, Ease of Use, Security, Reliability, Customer Satisfaction, and Retention Intention.

Each of these latent factors is measured by a set of observed items from the questionnaire. Specifically, items EFF01 to EFF06 combine to measure Efficiency (EFF), which reflects how effectively respondents perceive the digital financial service in terms of performance and speed. This is done through the use of factor loadings (Hair *et al.*, 2017). For instance, for the six items in EFF, we estimate six loadings α that measure the overall factor through:

$$EFF = \alpha_1 EFF01 + \alpha_2 EFF02 + \alpha_3 EFF03 + \alpha_4 EFF04 + \alpha_5 EFF05 + \alpha_6 EFF06$$

The same process is done for the rest of the factors in the model. Ease of Use (EAS) is formed by combining items EAS01 to EAS05, which assess how simple and user-friendly the platform is. Security (SEC), another crucial factor, is measured by SEC01 to SEC05, gauging the perceived safety and data protection provided by the service. Reliability (REL), which focuses on consistent and dependable service delivery, is represented by REL01 to REL05.

Customer Satisfaction (SAT), a key outcome of service quality, is measured using SAT01 to SAT05, capturing overall satisfaction with the digital financial service experience. Lastly, Retention Intention (RET) is evaluated by combining RET01 to RET05, reflecting the likelihood of customers continuing to use the service and recommending it to others.

Cronbach's Alpha

Once these latent factors are established, the reliability of each factor is assessed using Cronbach's Alpha (Hair, *et al.*, 2017), a statistic that measures internal consistency. For k items in a factor (for instance, $k=6$ for EFF), variance σ_i^2 associated with the i th item, and overall variance σ^2 for all items in the factor, the Alpha score is given by

$$\alpha = (k/(k-1))(1 - (\sum_{i=1}^k \sigma_i^2) / \sigma^2)$$

A high Cronbach's Alpha indicates that the observed items are reliable in measuring the corresponding latent variable. In addition to reliability, factor loadings are examined to determine the strength of the relationship between each observed item and its corresponding latent factor. Higher loadings suggest that an observed item is strongly associated with the latent factor it is intended to measure, quantifying which items most effectively capture the essence of the construct being evaluated.

Kaiser-Meyer-Olkin (KMO) Test

Another important measure used to confirm the factor model is the Kaiser-Meyer-Olkin (KMO) sampling adequacy measure. When performing exploratory factor analysis, there is a need to confirm at the preparatory stage whether enough samples have been collected to adequately model the complete factor structure that has been hypothesized for the data (Shrestha, 2021; Ul Hadia,

2016). Given a set of data on $j, k=1,2,\dots,p$ items, pairwise correlations r_{jk} and partial correlations p_{-jk} can be evaluated. The Kaiser-Meyer-Olkin measure of sampling adequacy is based on the proportion of common variance, which can be computed through r_{jk} and p_{-jk} as:

$$K = \frac{\sum_j \sum_{k \neq j} r_{jk}^2}{\sum_j \sum_{k \neq j} r_{jk}^2 + \sum_j \sum_{k \neq j} p_{-jk}^2}$$

The measure K falls within the range $[0,1]$, and it is generally recommended that K be at least 0.8 in order to declare the sample as adequate. Otherwise, lower values of K would indicate there being higher amounts of partial correlations than correlations, which would result in insensible factor loadings in the model. Srestha (2021) observes that the KMO test generally produces ideal results for samples of sizes around 100 to 200, with samples counting more than 200 members generally returning $K > 0.8$.

The items RAN01 to RAN04 in the questionnaire capture each respondent's ranking of the importance they attribute to the key ESERVQUAL factors: Efficiency (EFF), Ease of Use (EAS), Security (SEC), and Reliability (REL). These rankings quantify how respondents prioritize different aspects of digital financial service quality. By asking respondents to rank these factors, we gain a better understanding of their preferences, which can vary depending on individual needs and experiences with digital financial services.

For example, some respondents may place higher importance on Security (SEC), prioritizing the protection of their financial data and transactions, while others may prioritize Efficiency (EFF) due to a preference for fast and seamless transactions. Similarly, Ease of Use (EAS) and Reliability (REL) may hold differing levels of importance for users, depending on their experience and comfort with technology or their expectations of consistent service availability.

These items are not only used to capture individual preferences but also contribute to the demographic analysis of the sample population. By comparing the rankings provided by respondents in different demographic groups—such as age, location, or industry, we can analyze how the perceived importance of each ESERVQUAL factor varies across different segments of the population. This allows for a more detailed understanding of how different groups prioritize different aspects of service quality, which can be essential for targeted improvements or marketing strategies in the digital financial sector.

The first step in this phase is to measure how ESERVQUAL factors impact customer satisfaction by analyzing the regression relationships (Hair *et al.*, 2017) of EFF, EAS, SEC, and REL on SAT. This analysis allows us to understand which aspects of the digital financial service quality contribute the most to overall customer satisfaction. For example, if Efficiency has a significant positive regression coefficient, it implies that customers who perceive the service as efficient are more likely to report higher satisfaction levels.

Next, we assess the impact of ESERVQUAL on retention intention. This involves examining how the same service quality dimensions (EFF, EAS, SEC, and REL) influence RET, or the likelihood that a customer will continue using the service and recommend it to others. By comparing the regression coefficients in this model, we can determine which aspects of service quality are most influential in customer retention decisions. For instance, a significant positive coefficient for Security would suggest that customers who feel secure using the service are more likely to remain loyal.

Finally, to close the loop in the analysis, we explore how customer satisfaction itself influences retention intention. This involves regressing SAT on RET to measure how overall satisfaction affects customers' willingness to continue using the service. A strong and significant relationship here would confirm that satisfied customers are more likely to stay loyal to the digital financial service.

RESULTS AND DISCUSSION

The chapter discusses the results through analysis and interpretation of the collected data from the respondents of the survey.

Demographic Profile

Table 1: Demographic Indicators for Age, Sex, and Marital Status of Survey Participants

| Indicator | Level | Count | % |
|----------------|-----------------|------------|------------|
| Age | 27-30 years old | 203 | 51.8 |
| | 31-34 years old | 104 | 26.5 |
| | 35-38 years old | 48 | 12.2 |
| | 39-42 years old | 37 | 9.4 |
| | Total | 392 | 100 |
| Sex | Female | 239 | 61.0 |
| | Male | 153 | 39.0 |
| | Total | 392 | 100 |
| Marital Status | Married | 96 | 24.5 |
| | Separated | 4 | 1.0 |
| | Single | 288 | 73.5 |
| | Widowed | 4 | 1.0 |
| | Total | 392 | 100 |

Results showed that majority of the participating respondents belong to the age range of 27-30 years old with a 51.8% as shown in Table 1. This is followed by the group under 31-34 years old group, which accounts for 26.5% of the respondents, or 104 individuals. It is noticeable that as the age of the respondents increased, there is a diminishing exposure to DFS as shown among the age level of 35-38 years old and 39-42 years, making up 12.2% and 9.4% of the sample, respectively. These results corroborate with the findings of Valencia, et.al. (2021) and Berraies, et.al. (2016) which states that millennials are the most adoptable to technology as compared with

the prior generation since they are known to have grown up in a society filled with technology. Further, this also proved that millennials are known as digital natives and therefore, are comfortable and familiar with technology.

On the basis of sex, study showed that there was a higher representation of female respondents, constituting 61.0% as compared to males, who make up 39.0% or 153 individuals. This gender distribution indicates that digital financial services offered by digital financial service providers appeal mostly to women. Findings reflects societal trends where women are increasingly taking control of financial decisions.

In terms of marital status, the majority of respondents were single, accounting for 73.5% of the sample with 288 individuals. Married individuals represent 24.5% of the respondents, or 96 individuals, while those who are separated and widowed are a small minority, each constituting 1.0% of the sample with 4 individuals. This high proportion of single respondents might suggest that digital financial services are particularly appealing to individuals without familial financial obligations, or that single people have more flexibility and willingness to explore new financial tools.

Table 2: Locations of Residence of Survey Participants

| | Count | % |
|------------------|-------|------|
| Caloocan City | 17 | 4.3 |
| Las Pinas City | 7 | 1.8 |
| Makati City | 31 | 7.9 |
| Malabon City | 4 | 1.0 |
| Mandaluyong City | 40 | 10.2 |
| Manila City | 67 | 17.1 |
| Marikina City | 28 | 7.1 |
| Muntinlupa City | 13 | 3.3 |
| Navotas City | 3 | 0.8 |
| Paranaque City | 11 | 2.8 |
| Pasay City | 9 | 2.3 |
| Pasig City | 56 | 14.3 |
| Pateros | 6 | 1.5 |
| Quezon City | 58 | 14.8 |
| San Juan City | 6 | 1.5 |
| Taguig City | 17 | 4.3 |
| Valenzuela City | 19 | 4.8 |

The study also examines the residential locations of respondents. The data reveals that respondents are dispersed across various cities, with the highest concentrations in key urban areas. Manila City leads with 17.1% of the total sample, or 67 individuals, followed closely by Quezon City, which accounts for 14.8% with 58 individuals. These two cities are among the most populous in the region, which likely contributes to their higher representation in the study. Additionally, Pasig City shows a significant presence with 56 respondents, making up 14.3% of the sample.

Mandaluyong City also has a notable share, with 40 respondents representing 10.2% of the total. This suggests that the city, which is considered a commercial hub, has a considerable number of individuals engaged in digital financial services. Makati City, known as the financial center of the country, contributes 7.9% of the respondents with 31 individuals. Marikina City follows with 28 respondents, or 7.1% of the sample, indicating a moderate level of engagement from this area.

Other cities such as Valenzuela (4.8%), Caloocan (4.3%), and Taguig (4.3%) have smaller but still noteworthy representations. The lesser-represented cities include Muntinlupa (3.3%), Parañaque (2.8%), and Pasay (2.3%), with each contributing fewer than 20 respondents to the study. Navotas City, with just 3 respondents or 0.8%, has the smallest representation in the sample.

The geographical distribution of respondents highlights the concentration of digital financial services users in major urban centers, particularly those that are economically and commercially significant. It also underscores the potential for growth in areas with lower representation, suggesting that these cities may benefit from targeted outreach and increased accessibility to digital financial tools.

Table 3: Industry of Employment of Survey Participants

| | Count | % |
|------------------------------------|-------|------|
| Academe | 12 | 3.1 |
| Accounting and Finance | 149 | 38.0 |
| Airline | 3 | 0.8 |
| Business Process Outsourcing (BPO) | 81 | 20.7 |
| Engineering and Industrial | 11 | 2.8 |
| Government and NGO Services | 13 | 3.3 |
| Healthcare | 22 | 5.6 |
| Information Technology | 33 | 8.4 |
| Journalism | 3 | 0.8 |
| Marketing and Advertising | 3 | 0.8 |
| None | 2 | 0.5 |
| Power and Utilities | 4 | 1.0 |
| Restaurant and Food | 7 | 1.8 |
| Sales and Retail | 4 | 1.0 |
| Students and Self-Employed | 42 | 10.7 |
| Others (Real Estate, Sports, OFW) | 3 | 0.8 |

The study also explores the industries in which the respondents are employed. The largest proportion of respondents work in the accounting and finance industry, with 149 individuals representing 38.0% of the total sample. This strong presence suggests that professionals in this sector are particularly engaged with digital financial services, likely due to their familiarity with financial tools and the importance of efficient financial management in their work.

The business process outsourcing (BPO) industry is the second most represented, with 81 respondents, or 20.7%

of the sample. This significant share may be attributed to the large workforce in the BPO sector, which often includes young, tech-savvy individuals who are likely to adopt digital financial solutions. The information technology (IT) sector also has a notable representation, with 33 respondents, accounting for 8.4% of the total. This aligns with the expectation that IT professionals would be early adopters of digital financial services given their comfort with technology.

Self-employed individuals and students make up 10.7% of the sample, with 42 respondents. This group may turn to digital financial services for the flexibility and convenience they offer in managing finances independently. The healthcare industry is another significant sector, with 22 respondents or 5.6%, reflecting the increasing use of digital financial tools among healthcare professionals who may seek efficient ways to manage their finances alongside demanding work schedules.

Other industries, such as government and NGOs (3.3%), academe (3.1%), and engineering and industrial (2.8%), have smaller but meaningful representations. These sectors are likely less represented due to the specific nature of their work, which may not always align with the primary users of digital financial services. The restaurant and food industry (1.8%), sales and retail (1.0%), and power and utilities (1.8%) each contribute a smaller share of respondents.

Notably, some industries have minimal representation, including the airline, journalism, marketing and advertising, and others (e.g., real estate, sports, OFW), each accounting for only 0.8% of the sample with 3 respondents each. This low representation could indicate less reliance on digital financial services in these fields or could reflect smaller workforce sizes relative to other industries.

Table 4: Respondents' Reasons for Using Digital Financial Services

| Reasons for Using | Count | % |
|------------------------------------|-------|------|
| 24/7 Account Accessibility | 332 | 21.7 |
| Convenience | 348 | 22.7 |
| Financial Transactions done Faster | 282 | 18.4 |
| Free of charge fund transfers | 1 | 0.1 |
| No Maintaining Balance Requirement | 169 | 11.0 |
| Paperless Transaction | 216 | 14.1 |
| Savings with Higher Interest Rates | 162 | 10.6 |
| Secured | 1 | 0.1 |
| None of the Above | 20 | 1.3 |

DFS cover an extensive range of financial services carried through digital channels such as mobile phones, internet and other digital platforms. Hence, the researcher delves into the usage behavior of respondents regarding various digital financial services, focusing on the purpose behind their adoption of these platforms. The most commonly cited reason is convenience, with 348 responses,

accounting for 22.7% of the total selections. This suggests that the ease of use and accessibility of digital financial services play a crucial role in their popularity, allowing users to manage their finances more efficiently with minimal hassle and in real-time. The results corroborate the findings of Al-Ghraibah (2020) which states that ease of use is critical for digital services.

Another significant factor is the 24/7 account accessibility, which garnered 332 responses, making up 21.7% of the total. This indicates that users highly value the ability to access their financial accounts at anytime and anywhere without the need to visit the physical bank branch reflecting the growing demand for financial services that cater to the fast-paced, always-connected lifestyle of modern consumers. Moreover, people situated in distant areas can access financial services without the need to travel.

This is a cost-effective way to reduce expenses. Similarly, the ability to conduct financial transactions faster is another key reason, with 282 responses or 18.4%, highlighting the importance of efficiency in the digital financial experience. The results corroborate the findings of Raza *et al.* (2020) which states that clients are more attracted to digital financial service providers that has efficient digital platforms.

Paperless transactions are also a notable consideration, with 216 respondents (14.1%) selecting this reason. This preference underscores a shift towards environmentally friendly and efficient processes that reduce the reliance on physical paperwork. Additionally, the appeal of savings accounts with higher interest rates is reflected in the 162 responses, accounting for 10.6% of the selections. This indicates that users are not only looking for convenience but also for financial products that offer better returns on their savings.

The absence of a maintaining balance requirement is another reason for the adoption of digital financial services, with 169 respondents (11.0%) selecting this option. This feature likely attracts users who prefer flexibility in managing their accounts without the burden of maintaining a minimum balance. Interestingly, only 1 respondent each cited free-of-charge fund transfers and security as their reasons for using digital financial services, each representing just 0.1% of the total selections. This suggests that while these features are available, they may not be the primary drivers for most users.

Table 5: Respondents' Length and Frequency of Usage of Digital Financial Services

| Indicator | Level | Count | % |
|------------------|--------------------------|-------|------|
| Length of Use | 1-3 Years | 81 | 20.7 |
| | Less than 1 Year | 14 | 3.6 |
| | More than 3 Years | 297 | 75.8 |
| Frequency of Use | Always (7 times a Week) | 102 | 26.0 |
| | Often (4-6 times a Week) | 179 | 45.7 |
| | Seldom (Once a Month) | 27 | 6.9 |
| | Sometimes (Once a Week) | 84 | 21.4 |

Lastly, a small percentage of respondents (1.3% or 20 individuals) indicated that none of the listed reasons apply to their usage of digital financial services. This could imply that their motivations are unique or fall outside the common benefits typically associated with these platforms. The study also examines the respondents' duration and frequency of using digital financial services. As shown in table 5, a significant majority of the respondents, 297 individuals or 75.8%, have been using digital financial services for more than three years. This indicates a strong and established user base that has likely grown accustomed to the benefits and convenience offered by these services. On the other hand, a smaller portion, 20.7% or 81 respondents, have been using these services within range of 1-3 years, suggesting a relatively newer but still substantial group of users. The smallest segment, comprising only 14 respondents or 3.6%, has been using digital financial services for less than a year, indicating that while adoption is ongoing, most users have already integrated these services into their financial routines.

In terms of usage frequency, nearly half of the respondents, 179 individuals or 45.7%, report using digital financial services often, between 4-6 times a week. This high frequency of use underscores the critical role these services play in their daily financial activities. Additionally, 26.0% or 102 respondents use these services always, or 7 times a week, indicating that a significant portion of users are highly dependent on digital financial platforms for their regular transactions and financial management. Some respondents, 21.4% or 84 individuals, use these services sometimes, around once a week, which suggests that while they are not as frequent users, digital financial services still form an integral part of their financial habits. A small segment, 6.9% or 27 respondents, report using these services seldom, only once a month. This infrequent usage may reflect users who rely on digital financial services for specific, less regular transactions, or who are still in the process of fully integrating these tools into their financial management practices.

Table 6: Respondents' Average Ranking of Common Uses of Financial Services

| Activity | Ranking |
|----------------------------------|---------|
| Bills Payment | 4.23 |
| Transaction Monitoring | 4.11 |
| Balance Inquiry | 4.24 |
| Fund Transfers | 4.48 |
| Online Purchasing | 3.84 |
| Loans | 2.31 |
| Checkbook Reordering | 1.85 |
| Viewing of Electronic Statements | 3.53 |
| Others | 2.01 |

The study further investigates the respondents' frequency of using digital financial services for various types of transactions, rated on a scale from 1 (lowest) to 4 (highest). The results reveal that fund transfers are the

most frequently conducted activity, with an average rating of 4.48. This high ranking underscores the importance of quick and efficient money transfers, whether for personal or business purposes, and suggests that users heavily rely on digital platforms for this function.

Bills payment and balance inquiry each received an average rating of 4.23 and 4.24, indicating that these are also highly frequent activities. The equal ranking for these two activities suggests that users regularly use digital financial services not only to stay on top of their financial obligations but also to monitor their account balances closely. This reflects a growing preference for managing everyday financial tasks online, likely due to the convenience and immediacy these services provide.

Transaction monitoring follows closely, with an average rating of 4.11. This suggests that users are frequently keeping track of their financial activities, which is essential for budgeting and financial planning. Online purchasing is another common use of digital financial services, with an average rating of 3.84. This slightly lower rating compared to other activities may indicate that while online shopping is popular, it is not as universal as the

need for managing core financial activities like transfers, payments, and monitoring.

Activities such as viewing electronic statements also see regular use, with an average rating of 3.53. This suggests that users appreciate having easy access to their financial history, which is essential for transparency and record-keeping. However, other activities, such as loans (2.31) and checkbook reordering (1.85), are less frequently conducted through digital financial services. The lower ratings for these activities indicate that they may be more specialized needs or that users might prefer handling these tasks through other channels.

The category labeled “Others,” which could include a range of less common financial activities, has an average rating of 2.01, reflecting relatively infrequent usage. The lower frequency of these activities suggests that while digital financial services are widely used for everyday tasks, more specialized or less frequent transactions may still be handled through traditional methods or alternative platforms.

Frequency of Use and Rated Digital Financial Services

Table 7: Ranking of Frequency of Use and Rating Selection of Digital Services in Metro Manila Philippines

| Bank | Frequency | Selected | |
|---------------------------------------|-----------|----------|------|
| | Average | Count | % |
| Bank of the Philippine Islands | 1.89 | 52 | 13.3 |
| BDO Unibank Inc. | 2.57 | 37 | 9.4 |
| China Banking Corporation | 1.71 | 8 | 2.0 |
| GCash | 4.41 | 184 | 46.9 |
| Grab Pay | 2.62 | 6 | 1.5 |
| Maya Bank | 2.62 | 46 | 11.7 |
| Metropolitan Bank & Trust Corporation | 3.03 | 22 | 5.6 |
| Philippine National Bank | 2.15 | 12 | 3.1 |
| Shopee Pay | 2.89 | 13 | 3.3 |
| Tonik Digital Bank | 1.88 | 12 | 3.1 |

On Table 7, the study also examines the frequency of use of various digital financial services in the Philippines, as well as the respondents’ preferences of DFS providers. The results showed that GCash was the most preferred by the respondents, since it was the most frequently used service, with an average ranking of 4.41 and selected by 184 respondents, representing 46.9% of the total sample. This dominant preference for GCash highlights its widespread popularity and strong market presence as a convenient and accessible platform for digital transactions in the country. In contrast, traditional banks have lower frequency rankings and selection percentages. For instance, the Bank of the Philippine Islands (BPI) has an average ranking of 1.89, with 52 respondents (13.3%) choosing it for the survey. Similarly, BDO Unibank Inc. has a slightly higher ranking of 2.57 but was selected by only 37 respondents (9.4%). These figures suggest that while traditional banks like BPI and BDO are still relevant, they may not be as frequently used for everyday digital financial transactions

compared to mobile wallets like GCash. Maya Bank, another digital platform, has a moderate average ranking of 2.62 and was selected by 46 respondents, accounting for 11.7% of the sample. This indicates a growing adoption of Maya Bank, positioning it as a competitive player in the digital financial services sector. Similarly, Metropolitan Bank & Trust Corporation (Metrobank) has a higher average ranking of 3.03 but was selected by only 22 respondents (5.6%). This suggests that while Metrobank may be valued for certain services, its overall digital engagement is lower compared to leading digital platforms. Other services like Shopee Pay, with an average ranking of 2.89 and selected by 13 respondents (3.3%), and Tonik Digital Bank, with a ranking of 1.88 and also selected by 12 respondents (3.1%), show niche usage among the respondents. These platforms may cater to specific user needs but are not as widely adopted as GCash. Less frequently used services include China Banking

Corporation and Grab Pay, each with only 8 and 6 respondents selecting them (2.0% and 1.5%). The average rankings for these services are 1.71 and 2.62, respectively, indicating limited usage within the sample. The Philippine National Bank (PNB) also falls into this

category, with an average ranking of 2.15 and selected by 12 respondents (3.1%).

Electronic Service Qualities Efficiency

Table 8: Percentage Distribution of Respondents’ Ratings to Efficiency of Digital Services

| Item | SD | D | A | SA |
|--|-----|-----|------|------|
| I am able to fund my account quickly | 5.9 | 1.0 | 44.1 | 49.0 |
| I am able to process bills payment quickly | 5.9 | 4.1 | 37.8 | 52.3 |
| I am able to process fund transfers quickly | 6.4 | 1.8 | 39.5 | 52.3 |
| I am able to pay my online purchases quickly | 5.6 | 2.3 | 43.1 | 49.0 |
| Overall, I am able to perform financial transactions quickly | 5.9 | 2.3 | 40.6 | 51.3 |
| Overall, I am able to conveniently find what I need with the digital financial service | 6.1 | 1.5 | 43.1 | 49.2 |

Table 8 revealed the specific responses to questions on service quality. First, the respondents’ ratings on the efficiency of digital financial services reflect a generally positive experience, with a strong majority expressing agreement or strong agreement with the efficiency-related statements. Specifically, 49.0% of respondents strongly agree that they are able to fund their accounts quickly, with an additional 44.1% agreeing. Only a small minority, 5.9% strongly disagree, and 1.0% disagree, indicating that most users find the process of funding their accounts efficient.

When it comes to processing bill payments, 52.3% of respondents strongly agree that they can do so quickly, and 37.8% agree, making this another area where digital financial services perform well. However, a slightly higher proportion of respondents, 4.1%, disagree with this statement, suggesting there may be occasional issues with bill payment speed for some users.

Fund transfers also receive high marks for efficiency, with 52.3% of respondents strongly agreeing and 39.5% agreeing that they can process these transactions quickly. Despite this, a small percentage, 6.4%, strongly disagree, indicating that there are still some users who experience delays or inefficiencies in this area.

The ability to pay for online purchases quickly is another area where respondents report a high level of satisfaction. Here, 49.0% strongly agree and 43.1% agree, suggesting that most users find this aspect of digital

financial services efficient. A small portion of users, 5.6% strongly disagree, and 2.3% disagree, which could reflect occasional issues with processing speed during online shopping transactions.

Overall, 51.3% of respondents strongly agree that they are able to perform financial transactions quickly using digital financial services, with another 40.6% agreeing. This indicates a high level of overall satisfaction with the speed of these services, though 5.9% strongly disagree, and 2.3% disagree, indicating some room for improvement.

Finally, regarding the convenience of finding what they need within the digital financial services, 49.2% of respondents strongly agree that they can do so easily, and 43.1% agree. This suggests that the user interface and accessibility of these services are generally effective. However, 6.1% strongly disagree, and 1.5% disagree, pointing to potential areas where navigation and ease of use could be enhanced.

The overall rating for the quality “efficiency” reverberates an affirmative note where it received a Strongly Agree to all the responses. Hence, the results of the researcher substantiate the findings of Raza, *et al.* (2020) and supported by Egala, *et al.* (2021) that efficiency is indeed one of the significant E-SERVQUAL factor that contributes to the clients’ satisfaction and retention.

Ease of Use

Table 9: Percentage Distribution of Respondents’ Ratings to Ease of Use of Digital Services

| Item | SD | D | A | SA |
|---|-----|-----|------|------|
| The digital financial service I am using is user friendly | 5.4 | 2.8 | 48.5 | 43.4 |
| Navigating the interface of the digital financial service I am using is easy | 4.6 | 3.1 | 46.7 | 45.7 |
| I am comfortable in using the digital financial service I am using | 4.6 | 4.8 | 47.7 | 42.9 |
| Processing financial transactions in the digital financial service I am using is clear and easy to understand | 5.4 | 3.3 | 48.2 | 43.1 |
| Overall, the digital financial service I am using is easy to use | 6.9 | 2.6 | 43.6 | 46.9 |

Meanwhile, the respondents’ ratings on the ease of use of digital financial services reveal a generally favorable

perception, with a significant majority expressing agreement or strong agreement with the ease-of-use-

related statements. Specifically, 43.4% of respondents strongly agree that the digital financial service they are using is user-friendly, with an additional 48.5% agreeing. However, a small portion, 5.4% strongly disagree, and 2.8% disagree, indicating that while most users have a positive experience, there are some who encounter difficulties.

Navigating the interface of these services is also rated positively, with 45.7% of respondents strongly agreeing that it is easy, and 46.7% agreeing. This suggests that nearly all users find the interfaces of their chosen digital financial services to be intuitive and straightforward. Only a small fraction, 4.6% strongly disagree, and 3.1% disagree, pointing to a minority who may struggle with interface complexity or design issues.

Comfort in using digital financial services is another important aspect, and here, 42.9% of respondents strongly agree that they feel comfortable using these services, while 47.7% agree. This indicates that most users have a high level of comfort and confidence in their use of these platforms. However, the fact that 4.6% of respondents each strongly disagree and disagree suggests that there is a small segment of users who may feel uneasy or less confident when using these services.

When it comes to processing financial transactions, 43.1% of respondents strongly agree that the process is clear and easy to understand, with another 48.2% agreeing. This strong majority reflects a general ease in handling transactions through digital financial platforms, although 5.4% strongly disagree, and 3.3% disagree, indicating that some users find transaction processes confusing or complex.

Finally, when evaluating the overall ease of use, 46.9% of respondents strongly agree that the digital financial service they are using is easy to use, and 43.6% agree. This high level of overall satisfaction suggests that the vast majority of users find these services accessible and user-friendly. However, a small percentage, 6.9% strongly disagree, and 2.6% disagree, suggesting that there are still areas for improvement to ensure that the experience is consistently positive for all users.

The overall rating for the quality “ease of use” confirms a positive response of the respondents. Hence, the results of the researcher substantiate the findings of Raza, *et al.* (2020) and supported by Egala, *et al.* (2021) that ease of use is also indeed one of the significant E-SERVQUAL factor that contributes to the clients’ satisfaction and retention.

Security

Table 10: Percentage Distribution of Respondents’ Ratings to Security of Digital Services

| Item | SD | D | A | SA |
|--|-----|------|------|------|
| The digital financial service I am using is consistently asking me to change my password | 6.1 | 26.3 | 42.9 | 24.7 |
| I believe the digital financial service I am using is doing everything to protect me from fraud or hacking | 4.1 | 7.4 | 62.0 | 26.5 |
| I believe my personal information is being processed securely and professionally by the digital financial service I am using | 5.6 | 5.6 | 64.8 | 24.0 |
| Overall, I feel secure doing financial transaction with the digital financial service I am using | 4.1 | 6.4 | 63.5 | 26.0 |
| I would prefer that the government will provide insurance that ensures the safety of deposits against cybercrime | 4.3 | 2.6 | 44.6 | 48.5 |

One of the challenges of digital financial services is cybersecurity risks. As technology advances, cybersecurity threats continue to progress, posing a risk to safety and integrity of digital financial transactions. Table 10 shows the respondents’ ratings on the security features of digital financial services reveal a mixture of confidence and concern, reflecting the critical importance of security in financial transactions. One area where opinions are somewhat divided is the frequency of being asked to change passwords. Only 24.7% of respondents strongly agree that the digital financial service they are using consistently prompts them to change their passwords, while 42.9% agree. However, a significant 26.3% disagree, and 6.1% strongly disagree, suggesting that a considerable portion of users feel that password security measures could be more robust or frequent.

The frequent change of password is one of the security measures recommended by the regulating agency to avoid the hacking incident. Although part of the

security measures, it can also be mentally taxing and time consuming. Since there can be struggle to recall the password. The regulating agency suggests the presence of strong password. Hence, it is important for DFS providers to balance the need for security and convenience of the user such as use of two-factor authentication or biometrics.

Despite this, the respondents generally express confidence in the protective measures of their digital financial services. A strong majority, 62.0%, agree, and 26.5% strongly agree that their service is doing everything possible to protect them from fraud or hacking. This indicates a high level of trust in the security protocols of these platforms, although a small segment of respondents, 7.4% disagree, and 4.1% strongly disagree, indicating that some users still have reservations about the effectiveness of these security measures.

When it comes to the processing of personal information, 64.8% of respondents agree, and 24.0% strongly agree that

their personal data is handled securely and professionally. This widespread agreement suggests that most users feel their privacy is respected and protected. However, there is a minority, with 5.6% strongly disagreeing and another 5.6% disagreeing, who are concerned about the security of their personal information, indicating an area where trust could be improved.

Overall, the majority of respondents feel secure when conducting financial transactions through their digital financial service, with 63.5% agreeing and 26.0% strongly agreeing. This high level of perceived security is crucial for the continued use and growth of these platforms. Nonetheless, 6.4% disagree, and 4.1% strongly disagree, pointing out that there is still a subset of users who do not feel entirely safe, highlighting the need for ongoing security enhancements.

It is interesting to note that users were clamoring for strong support from the government via insurance against cybercrimes. Table 10 row 5 showed a significant 48.5% of respondents strongly agree that the government

should provide insurance to protect deposits against cyber threats, with an additional 44.6% agreeing. This overwhelming consensus reflects a desire for additional safety nets and indicates that while users generally trust their digital financial services, they would feel more secure with external protection measures in place. Only a small minority, 4.3% strongly disagree, and 2.6% disagree, suggesting that most users see value in government-backed security guarantees such as insurance in the event a digital banking account was hacked, streamlined recovery of the hacked account, quick response against cybercrime and stricter legislative policies against cybercrime.

The overall rating for the quality “security” confirms a positive response of the respondents. Hence, the results of the researcher substantiate the findings of Haq *et al.* (2020) and supported by Egala *et al.* (2021) that security is also indeed one of the significant E-SERVQUAL factor that contributes to the clients’ satisfaction and retention.

Reliability

Table 11: Percentage Distribution of Respondents’ Ratings to Reliability of Digital Services

| Item | SD | D | A | SA |
|--|-----|------|------|------|
| Transactions with the digital financial service I am using are error-free | 7.1 | 22.2 | 54.3 | 16.3 |
| Customer service of the digital financial service I am using are extending efforts to address my concerns and issues | 5.6 | 12.0 | 65.1 | 17.3 |
| I prefer using digital financial service instead of going to a branch | 3.6 | 1.8 | 52.6 | 42.1 |
| I am able to access the digital financial service anytime and anywhere as long as there is an internet connection | 3.3 | 1.8 | 53.6 | 41.3 |
| The digital financial service I am using is able to deliver the expected service | 3.1 | 6.1 | 58.7 | 32.1 |

The respondents’ ratings on the reliability of digital financial services indicate a strong overall satisfaction, although there are areas where users experience occasional issues. In terms of error-free transactions, 54.3% of respondents agree that their transactions are conducted without errors, and 16.3% strongly agree. However, a significant 22.2% disagree, and 7.1% strongly disagree, suggesting that nearly a third of the users have encountered transaction errors, indicating a need for improved reliability in this aspect.

Customer service is another critical area in which respondents generally express satisfaction. A majority of 65.1% agree, and 17.3% strongly agree that the customer service teams of their digital financial services extend efforts to address concerns and issues effectively. This reflects a positive perception of the support provided, though 12.0% disagree, and 5.6% strongly disagree, indicating that some users feel their issues are not adequately resolved, pointing to a potential area for improvement in customer service responsiveness and effectiveness.

A notable preference for digital services over traditional banking is evident, with 42.1% of respondents strongly agreeing that they prefer using digital financial services instead of visiting a physical branch, and 52.6% agreeing. This overwhelming preference underscores the

convenience and efficiency that digital platforms offer. Only a small minority, 3.6% strongly disagree, and 1.8% disagree, indicating that very few users prefer in-person banking.

Accessibility of digital financial services is another key strength highlighted by the respondents. A substantial 53.6% agree, and 41.3% strongly agree that they can access their digital financial service anytime and anywhere, as long as they have an internet connection. This high level of satisfaction reflects the reliability of these services in providing uninterrupted access, with only 3.3% strongly disagreeing, and 1.8% disagreeing, indicating minimal accessibility issues.

Finally, in terms of delivering expected services, 58.7% of respondents agree, and 32.1% strongly agree that their digital financial services meet their expectations. This strong positive response suggests that the majority of users are satisfied with the overall reliability and performance of their digital financial platforms. However, 6.1% disagree, and 3.1% strongly disagree, indicating that a small but notable group of users feels that their expectations are not consistently met.

The overall rating for the quality “reliability” confirms a positive response of the respondents. Hence, the results of the researcher substantiate the findings of Raza *et al.* (2020) and supported by Egala *et al.* (2021) that reliability

is also indeed one of the significant E-SERVQUAL factor that contributes to the clients' satisfaction and retention.

Importance of Digital Financial Services Qualities

Table 12: Percentage Distribution of Respondents' Rankings of Importance of Digital Service Features

| | 1 | 2 | 3 | 4 |
|-------------|------|------|------|------|
| Efficiency | 17.3 | 35.7 | 29.1 | 17.9 |
| Ease of Use | 37.2 | 24.0 | 27.8 | 11.0 |
| Security | 5.1 | 15.6 | 16.1 | 63.3 |
| Reliability | 40.3 | 24.7 | 27.0 | 7.9 |

Table 12 reveals the results of ranking based on the importance of E-SERVQUAL with 1 being the lowest and 4 being the highest. It showed that security of digital financial services was rated the highest significance by the respondents. A strong majority of 63.3% with the highest rating of 4, indicating that respondents would like their accounts to be protected as they use the digital financial service. This is followed by efficiency with a 35.7% or a value of 2. Meanwhile, ease of use and reliability is rated at 1 with 37.2% and 40.3% of respondents respectively. In terms of ease of use, the ratings are skewed towards the lower end. A notable 37.2% of respondents rated ease of use as 1, the lowest score, indicating that a substantial portion of users struggles with navigating these services. Another 24.0% rated it as 2, showing some dissatisfaction, while 27.8% gave it a 3, and only 11.0% rated it the highest, suggesting that ease of use is a significant challenge for many users.

The security of digital financial services, however, is rated

quite positively by the respondents. A strong majority of 63.3% gave security the highest rating of 4, indicating a high level of confidence in the safety and protection provided by these services. Only 5.1% rated security as 1, and 15.6% as 2, with 16.1% giving it a 3. This distribution suggests that while most users feel secure using these platforms, there remains a small group that has reservations about security.

Reliability appears to be a concern among respondents, with 40.3% giving it the lowest rating of 1, indicating significant dissatisfaction. Another 24.7% rated reliability as 2, while 27.0% gave it a 3, and only 7.9% rated it the highest at 4. These ratings suggest that many users experience issues with the consistency and dependability of digital financial services, which could impact their overall satisfaction and willingness to continue using these platforms.

Satisfaction on Digital Financial Services

Table 13: Percentage Distribution of Respondents' Ratings to Satisfaction towards Digital Services

| Item | SD | D | A | SA |
|--|-----|-----|------|------|
| I am satisfied with the efficiency delivered by the digital financial service I am using | 5.1 | 3.6 | 56.6 | 34.7 |
| I am satisfied with the ease of use the digital financial service I am using | 5.1 | 4.1 | 54.1 | 36.7 |
| I am satisfied with the security features provided by the digital financial service I am using | 5.6 | 7.1 | 58.7 | 28.6 |
| I am satisfied with the reliability of the digital financial service I am using | 5.4 | 4.8 | 60.5 | 29.3 |
| Overall, I am satisfied with the digital financial service I am using | 5.1 | 4.3 | 59.7 | 30.9 |

Table 13 showed that overall respondents' level of satisfaction and retention intention with these digital financial services variables is 59.7%, which is high. While 30.9% strongly agreeing that they are satisfied with the service they receive. This cumulative satisfaction underscores the effectiveness and appeal of digital financial platforms. However, 5.1% strongly disagree and 4.3% disagree, suggesting that while the majority of users are content, there remains a small group of users whose needs or expectations are not fully met.

In terms of the efficiency of these services, 56.6% of respondents agree while 34.7% strongly agree that they were satisfied with the DFS' efficiency delivered. This indicates that over 90% of users feel that their digital financial platforms operate efficiently, although 5.1% strongly disagree and 3.6% disagree, suggesting that a small minority of users experience issues with efficiency. Hence, the researcher rejects the null hypothesis 1 which

states that efficiency has no significant influence on client satisfaction.

Satisfaction with ease of use is similarly high, with 54.1% of respondents agreeing and 36.7% strongly agreeing that they find their digital financial services easy to use. This reflects a strong positive sentiment towards the user-friendliness of these platforms. However, 5.1% strongly disagree, and 4.1% disagree, pointing to a subset of users who may find these services more challenging to navigate or use. Hence, the researcher rejects the null hypothesis 2 which states that ease of use has no significant influence on client satisfaction.

Security features, a crucial aspect of digital financial services, also receive favorable ratings. A majority of 58.7% of respondents agree, and 28.6% strongly agree that they are satisfied with the security provided by their digital financial services. Nonetheless, 7.1% disagree, and 5.6% strongly disagree, indicating that around 14%

of users have concerns about the security measures in place, which could be an area for further improvement. Hence, the researcher rejects the null hypothesis 3 which states that security has no significant influence on client satisfaction.

Regarding reliability, 60.5% of respondents agree, and 29.3% strongly agree that they are satisfied with how reliable their digital financial services are. This suggests that most users feel confident in the dependability of these services, though 5.4% strongly disagree, and 4.8% disagree, indicating that a small percentage of users have encountered reliability issues. Hence, the researcher rejects the null hypothesis 4 which states that reliability has no significant influence on client satisfaction.

Challenges in using DFS might affect satisfaction. Results showed that there is a lack of customer support which inconveniences resolving issues such as unposted transactions and delayed bills payment. In addition, depositing funds to accounts are expensive due to transfer charges from another account as digital financial service providers are mostly branchless which requires clients to fund their accounts through fund transfers. Moreover, the Philippines still has an intermittent internet connectivity which will result to inaccessibility to DFS platforms.

Reliability and Validity

Table 14: Reliability Scores of Extracted Factors

| | Alpha |
|--------------|-------|
| Frequency | 0.77 |
| Efficiency | 0.97 |
| Ease | 0.97 |
| Security | 0.91 |
| Reliability | 0.89 |
| Satisfaction | 0.96 |

The results of the factor analysis and the reliability scores of the obtained factors indicate strong internal consistency and the suitability of the data for this type of analysis. The Kaiser-Meyer-Olkin (KMO) test, which measures sampling adequacy, is found to be at 0.96. A KMO value close to 1.0 is considered excellent, indicating that the correlations between variables are compact and that factor analysis is highly appropriate for the dataset. The reliability of the factors, as measured by Cronbach's Alpha, shows high internal consistency across all the latent factors identified. The Efficiency factor has an exceptionally high Alpha of 0.97, reflecting almost perfect internal reliability. Similarly, the Ease factor also shows an Alpha of 0.97, suggesting that the items grouped under this factor consistently measure the same underlying construct. Satisfaction factor also exhibit very high reliability scores, both with an Alpha of 0.96. This indicates that the items associated with these factors reliably assess the respondents' overall satisfaction with the digital financial services and their likelihood to continue using and recommending these services.

The Security factor, with an Alpha of 0.91, and the Reliability factor, with an Alpha of 0.89, also demonstrate strong internal consistency. Although these values are slightly lower than those for Efficiency, Ease, Satisfaction, and Retention, they are still well within the acceptable range, confirming that the items related to security and reliability are consistently measuring their respective constructs.

Finally, the Frequency factor, with an Alpha of 0.77, is slightly lower than the others but still indicates acceptable reliability. This suggests that while the items related to the frequency of use are somewhat consistent, there may be more variability in how respondents perceive or report their usage frequency.

CONCLUSION

Summary of Findings and Conclusion

The study showed that the age range of 27-30 are the highest age group that uses DFS with a diminishing effect as the age increases. Showing that younger generations are more attracted in using DFS due to their comfortability and familiarity with technology. In addition, there are more women using DFS as compared to men, showing that women are increasingly taking control of financial decisions. Moreover, there is a high proportion of single respondents this suggests that digital financial services are particularly appealing to individuals without familial financial obligations since they have more flexibility and willingness to explore new financial tools.

Furthermore, results of the study showed efficiency, security and reliability have significant impact on driving client satisfaction. Indicating that the higher the rating on these variables the higher the client satisfaction with the DFS. However, ease of use does not significantly impact client satisfaction.

In conclusion efficiency, security and reliability greatly impact overall client satisfaction. Furthermore, respondents rated security as the most important factor among the four E-SERVQUAL in this study. This indicates that respondents wanted their digital banking accounts secured while they are using the service provided by digital financial service providers.

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