

The Adoption of Online Banking in Dumaguete City, Philippines

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Abstract

This study investigates and assesses the adoption of online banking in Dumaguete City, Philippines, focusing on identifying the factors that influence client engagement and satisfaction. Grounded in the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT), the research explores user perceptions in terms of online banking features and services, technological advancements, and perceived ease of use and usefulness. Using a descriptive-correlational research design, data were collected from 155 adult residents through validated survey instruments. The findings reveal a very positive perception of online banking driven by its convenience, security, and efficiency, particularly among younger, highly educated, and employed individuals. The study shows a significant relationship between client perceptions of online banking and their engagement, specifically in usage frequency and satisfaction. However, disparities exist in service adoption across different transaction types, and areas such as technical reliability and customer support require improvement. No significant differences in perceptions were observed across demographic profiles. The results have practical implications for financial institutions, suggesting that enhancing technological features, simplifying transaction processes, and improving digital literacy can boost user adoption and satisfaction, contributing to broader financial inclusion in regional areas.

Keywords: Online Banking, Technology Adoption, Technology Acceptance Model (TAM), Unified Theory of Acceptance and Use of Technology (UTAUT), Customer Satisfaction, Digital Banking

Introduction

Change is a constant aspect of life, and as time progresses, everything around us continues to evolve. Over the years, technology has significantly transformed society, reshaping the way we conduct our daily lives. The outbreak of the global pandemic (COVID-19) further accelerated the digital shift, as lockdowns and social distancing measures rendered traditional banking methods less accessible. As a result, online services have emerged as essential tools, enabling people to accomplish tasks efficiently while safeguarding their health and conserving time, money, and energy. Consequently, technology has become a vital means of sustaining both personal and financial activities in the modern world. Economic shifts, along with rapid technological progress, are driving banks to reconsider their reliance on traditional brick-and-mortar branches and to explore strategic collaborations for delivering financial services (Cumming et al., 2023). The extensive integration of information technology within the banking sector and various industries has enabled the automation of financial processes (Omotayo, 2020). This digital evolution has introduced novel avenues for organizations to interact with their clientele, thereby improving the quality and efficiency of banking and financial services (Raza et al., 2020). Thus, the internet is increasingly becoming the preferred platform for banking operations (Cumming et al., 2023).

Most current research focuses on metropolitan regions, therefore there is a knowledge vacuum about the factors influencing the adoption of internet banking in smaller, less populated places. In order to bridge this gap, the factors impacting Dumaguete City's adoption of online banking are examined in this study. Carrying out this study is imperative for several reasons. First, it will shed light on the challenges and opportunities tied to online banking in Dumaguete, thereby contributing to the larger conversation on online banking inclusion. Additionally, the results can guide local financial institutions and policymakers in crafting strategies to boost online banking usage and cater to the specific requirements of Dumaguete's population. Finally, this research will enrich the academic field by examining the relevance of the Technology Acceptance Model and Unified Theory of Acceptance and Use of Technology in a novel and less-explored setting.

Thus, this study aims to assess the adoption of online banking in Dumaguete City, as well as describe the different issues and challenges affecting its acceptance and utilization. Specifically, it endeavors to answer the following sub-problems:

1. What is the profile of the respondents in terms of the following:
 - 1.1 age;
 - 1.2 sex;
 - 1.3 marital status;
 - 1.4 highest educational attainment;
 - 1.5 employment status?

2. What are the perceptions of the clients to the factors influencing the adoption of online banking in Dumaguete City in terms of:
 - 2.1 Online banking features and services
 - 2.2 Technological innovations and advancements;
 - 2.3 Perceived usefulness and perceived ease of use?
3. What is the level of the client's online banking engagement in Dumaguete City in terms of:
 - 3.1 Usage frequency;
 - 3.2 Customer satisfaction?
4. Is there a significant relationship between the factors influencing the adoption of online banking and the client's online banking engagement in Dumaguete City?
5. Is there a significant difference on the factors influencing the adoption of online banking when respondents are grouped according to:
 - 5.1 Age
 - 5.2 Sex
 - 5.3 Marital Status
 - 5.4 Educational attainment
 - 5.5 Employment status

Literature Review

The swift progression of information technology has significantly transformed the banking industry. This literature review consolidates various studies that delve into the multifaceted impacts of technological advancements on banking operations, customer interactions, and the overall quality of services provided.

The benefits of information technology include reduced costs, flexible maintenance, efficacy, efficiency, and significantly higher productivity (Ali et al., 2019; Kaur et al., 2021). The digitization of banking processes has led to considerable changes in the industry and enhanced operational efficiency (Omotayo, 2020). Consequently, Raza et al. (2020) note that the expansion of information technology has significantly enhanced banking and financial services. Additionally, it has created new avenues for communication between financial institutions and their clients. Online banking allows commercial banks to provide clients with services via digital or electronic channels and it is transforming the financial services industry by encouraging innovation, expansion, and increased internal and external competitiveness (Aynaddis et al., 2023; Yang et al., 2023). Moreover, Vebiana (2020) stipulates that in the current digital era, customers are drawn to online banking options due to their convenience and speed, reflecting the societal movement towards immediate solutions. Online banking allows customers to perform a broad range of banking services from the convenience of their homes using an internet-enabled device.

Banks are increasingly adopting to technology that allows customers to complete a greater variety of tasks online, such as cashless transactions that offer a secure and convenient means of making payments (Singh, 2019) and cheque image clearing for remote cheque payments and the use of intelligent chatbots to enhance customer service and support employees (Kannan, 2023). Also, the convenience of paying various bills, including phone bills, electricity charges, and rent through online banking is advantageous for everyone (Alzoubi, 2022). Additionally, all transaction information is stored at the bank terminal, users can access online banking without purchasing software or backup devices (He et al., 2019). Furthermore, online banking enhances security through well-protected account privacy and robust mechanisms for resolving disputes, supported by relevant laws and regulations (Lin et al., 2020). Prakosa et al. (2021) also added that online account validation and biometric techniques serve as alternatives to traditional face-to-face verification that enable customers to save time. Unlike traditional bank branches, the swift expansion of online banking presents significant advantages for banking institutions and intense competition among them (Lin et al., 2020).

Technological advancements have propelled the banking industry into the digital age. According to Starnawska (2021), the incorporation of mobile applications, biometric authentication, artificial intelligence, machine learning, and blockchain technology has enhanced operations and increased the security and efficiency of financial services. These innovations have shifted traditional banking methods to more flexible and accessible online and mobile banking options (Starnawska, 2021). Online banking presents financial institutions with a myriad of opportunities to improve banks services, such as effective financial solutions, economical communication tools, innovative products and services, and enhanced monitoring of errors within the financial system (Vebiana, 2020).

Moreover, the digital transformation in banking has triggered a surge in online fraud, as cybercriminals employ advanced technologies such as malware, phishing, trojans, viruses, denial of service attacks, and identity theft (Ahmad et al., 2021). Another significant barrier to online banking technology is the low degree of digital literacy. Limited financial and technological understanding significantly impacts usage levels. Customers with knowledge, resources, and an understanding of security and privacy are more receptive to adopting new technology (Matar et al., 2022). Additionally, Lin et al. (2020) indicate that in order to use online services, customers must supply sensitive information, leading to concerns about data security. These worries can heighten the perceived risks linked to online

transactions, which can affect consumer engagement. The nature of online banking requires the sharing of sensitive documents or personal information, and any possible security vulnerabilities can threaten users' rights and interests. As a result, individuals may lose trust in online banking and choose to forgo its services. It is crucial for financial institutions to tackle users' security issues, build confidence and trust, and improve their willingness to engage with online banking (Merhi et al., 2020).

Clients anticipate using online banking similarly to social media, accessing services anytime, from any location, and in any circumstance (Alkhowaiter, 2020). However, the digital transformation of banks also brings concerns around privacy, security, time, performance risks, and other related hazards (Alkhowaiter, 2020). Financial institutions must address users' security concerns, foster confidence and trust, and enhance client's willingness to use online banking.

Perceived usefulness is a key factor in the adoption of information systems, described as the extent to which a user can enhance their work efficiency with new technology (Hu et al., 2019). Perceived ease of use indicates how comfortable consumers feel and the effort they expend while learning to navigate online banking services. It enhances the services and experiences for bank customers, effectively compensating for the bank's shortcomings in addressing personalized demands (Hu et al., 2019). Online banking's digital infrastructure supports the information delivery system, improving the impact of perceived usefulness on the intention to utilize the technology (Yang et al., 2020). The advancement of online banking significantly enhances the customer experience. Financial institutions are transitioning to digital options to enhance satisfaction for both customers and employees, increase revenue, and reduce costs. Online banking elevates the customer experience by providing greater convenience (Prakosa et al., 2021).

According to Islam et al., (2020) service quality is often characterized as the gap between customer expectations and their actual experiences. It involves the ability to adjust to customer needs during service delivery and the results of customers' assessments by contrasting their expectations with the perceived quality received. Customer loyalty and satisfaction are positively correlated with service quality, making customer happiness a predictor of service quality (Sharma et al., 2020). Banks that are less adaptable to market shifts and customer preferences risk losing their customers. The ability of a banking organization to maintain client satisfaction directly affects customer loyalty to its services (Sudirjo et al., 2024). Customers who are satisfied are more likely to interact with the bank, foster enduring relationships, and refer it to others, which helps the bank grow its customer base and market presence. Customer compliance—obeying the regulations, policies, and procedures established by financial institutions—is crucial for safeguarding customers' interests, sustaining the banking system's integrity, and building trust between consumers and financial institutions (Leclercq-Machado et al., 2022).

Banks must pay attention to the requirements and wishes of their clients, offer excellent services, and develop novel and practical products to retain trust and integrity in their commercial interactions (Christanto et al., 2022). Ensuring client loyalty and compliance is essential for preserving the bank's ability to conduct business as usual (Boonlertvanich, 2019). The evaluation and decision-making process of clients regarding the excellence of electronic services is influenced by factors such as fulfillment of confirmation, accessibility of efficiency frameworks, privacy, responsiveness to inquiries, website design, and guidance. These factors significantly contribute to electronic satisfaction and degree of utilization in the context of online banking service quality (Khatoon et al., 2020).

Methodology

Research Design

This research employed a descriptive-correlational methodology to explore the determinants affecting the uptake of online banking services among adult inhabitants of Dumaguete City, Philippines. The descriptive aspect aimed to delineate users' perceptions and their engagement levels with online banking platforms, whereas the correlational facet analyzed the associations between these perceptions and actual usage behaviors.

Research Environment

This study was conducted in Dumaguete City, the capital of the province of Negros Oriental, located in the Central Visayas region of the Philippines. Known as the "City of Gentle People," Dumaguete is both a cultural and economic hub of the province and a recognized center for education and innovation in the region. In recent years, Dumaguete has experienced growth in its banking sector, with major commercial banks and rural banks establishing branches throughout the city. The availability of financial services, combined with the city's digitally inclined population, presents a dynamic environment for exploring user adoption of online banking technologies. The findings from this research are expected to provide meaningful insights for financial institutions operating in similar semi-urban or regional settings.

Research Respondents

The study was conducted in Dumaguete City and targeted adults who had experience using online banking. From an initial pool of 400 randomly selected residents, 155 respondents met the inclusion criterion of having used online

banking and were included in the analysis. The sampling strategy employed was purposive criterion sampling, ensuring that only individuals with relevant user experience were analyzed.

Research Instrument

The researcher crafted a structured survey instrument, drawing upon pertinent literature and the study's conceptual framework. This tool encompassed five distinct sections: (1) participant information and consent, (2) demographic details, (3) patterns of online banking usage, (4) perceptions of influencing factors, and (5) indicators of user engagement. To ensure content validity, three business administration experts from Foundation University reviewed the instrument. Subsequently, a pilot test was conducted with 30 individuals from outside Dumaguete City. The instrument's reliability was assessed using Cronbach's Alpha, yielding a coefficient of 0.85, which signifies a high level of internal consistency.

Ethical Considerations

Ethical considerations were the paramount throughout the study's duration. Respondents were briefed on the study's objectives, their voluntary involvement, and the confidentiality of their responses. Strict confidentiality measures were upheld to ensure the anonymity of respondents' data.

Data Gathering Procedure

The researcher secured the necessary approvals from the Dean of Graduate School at Foundation University to conduct the study. A formal endorsement from the university allowed the distribution of the research instrument to the target population. Respondents were selected using purposive criterion sampling, specifically targeting individuals who had prior experience with online banking. To reach a diverse demographic, questionnaires were disseminated through both online (Google Forms, email) and face-to-face methods. The hybrid approach was intended to ensure inclusion of participants with varying levels of digital access and literacy. All participants were provided with a cover letter and informed consent form, which outlined the study's objectives, the voluntary nature of participation, and assurances regarding confidentiality and anonymity. Only respondents who gave explicit consent were allowed to proceed with the survey. To ensure data integrity and completeness, responses were screened prior to analysis. Incomplete or inconsistent entries were discarded. The final dataset included only valid and fully completed responses that met the inclusion criteria. The collected data was then tallied and analyzed to draw conclusions.

Statistical Analysis of Data

The collected data were processed and analyzed through appropriate statistical tools. Descriptive measures—including frequencies, percentages, and weighted averages—were utilized to present the demographic characteristics, user perceptions of online banking, and levels of engagement. To evaluate the degree and direction of association between influencing variables and user involvement, the Spearman Rank-Order Correlation was applied. Additionally, the Mann-Whitney U Test and the Kruskal-Wallis H Test were used to determine statistically significant differences in perceptions across demographic groups such as age, gender, educational attainment, and employment status.

The researcher applied specific interpretative frameworks to evaluate the determinants of online banking adoption, focusing on service features, technological innovations, and users' perceptions regarding usefulness and ease of use within the context of Dumaguete City.

Score	Scale	Verbal Description	Interpretation	Explanation
5	4.21-5.00	Strongly Agree	Very Positive	The feeling/ behavior is felt/manifested by the respondent 81%-100% of the time
4	3.41-4.20	Agree	Positive	The feeling/ behavior is felt/manifested by the respondent 61%-80% of the time
3	2.61-3.40	Moderately Agree	Neutral	The feeling/ behavior is felt/manifested by the respondent 41%-60% of the time
2	2.61-3.40	Disagree	Negative	The feeling/behavior is felt/manifested by the respondent 21% - 40% of the time.
1	1.81-2.60	Strongly Disagree	Very Negative	The feeling/behavior is felt/manifested by the respondent 1% - 20% of the time.

Furthermore, the researcher used the following classifications to assess the client's online banking engagement in terms of usage frequency.

Score	Scale	Verbal Description	Interpretation	Explanation
5	4.21-5.00	Always	Very Positive	The behavior occurred/done by the respondent 81%-100% of the time
4	3.41-4.20	Frequently	Positive	The behavior occurred/done by the respondent 61%-80% of the time
3	2.61-3.40	Sometimes	Neutral	The behavior occurred/done by the respondent 41%-60% of the time
2	2.61-3.40	Rarely	Negative	The behavior occurred/done by the respondent 21% - 40% of the time.
1	1.81-2.60	Never	Very Negative	The behavior occurred/done by the respondent 1% - 20% of the time.

Results

The data gathered is arranged systematically based on the order of the problems and is presented in both textual and tabular formats.

Table 1.1 *Profile of the Respondents*

Age	Frequency	Percent
21 – 25	47	30.32
26 – 30	60	38.71
31 – 35	30	19.36
>35	18	11.61
Total	155	100%

The table shows that the largest percentage of respondents are between the ages of 26-30 or 38.71% of the sample population followed by ages 21-25 or 30.32%, ages 31-35 or 19.36% and over 35 years old or 11.61%.

Table 1.2 *Sex Profile of the Respondents*

Sex	Frequency	Percent
Male	55	35.48
Female	100	64.52
Total	155	100%

The table reveals the respondents' sex profile, with women making up the largest percentage of 64.52% compared to men with only 35.48%.

Table 1.3 *Marital Status of the Respondents*

Marital Status	Frequency	Percent
Single	112	72.26
Married	43	27.74
Total	155	100%

The table presents the marital status of the respondents, 72.26% of them are single, while the remaining 27.74% are married.

Table 1.4 *Educational Attainment of the Respondents*

Educational Attainment	Frequency	Percent
High School Graduate	20	12.90
College Graduate	116	74.84

Post Graduate Studies	12	7.74
Vocational/Technical Course	7	4.52
Total	155	100%

The table shows that the majority of respondents or 78.84% are college graduate followed by high school graduate which is composed of 12.90%, 7.74% undergone post graduate studies and 4.52% of the total respondents took vocational/technical courses.

Table 1.5 *Employment Status of the Respondents*

Educational Attainment	Frequency	Percent
Employed	125	80.64
Unemployed	15	9.68
Self-Employed	15	9.68
Total	155	100%

The table reveals that a significant majority of the respondents or 80.64%, in contrast, both the unemployed and self-employed categories each account for 9.68% of the respondents.

Table 2.1 *Clients' Perceptions on the Factors Influencing the Adoption of Online Banking in terms of Features and Services (n = 155)*

I adopted online banking because of the following:	w $\bar{x}$	VD	PI
1. Fund transfers (within the same bank, to other banks) are quick and hassle-free.	4.68	SA	VP
2. Secure login/authentication features provide adequate protection for my accounts resulting in trust in the bank and its online services.	4.67	SA	VP
3. Bill payment features are convenient and easy to use and user friendly.	4.64	SA	VP
4. Customer support (chat, phone, email) is responsive and satisfactory.	4.01	A	P
Composite	4.50	SA	VP

Legend:	Scale	Verbal Description (VD)	Perception Interpretation (PI)
	4.21 – 5.00	Strongly Agree (SA)	Very Positive (VP)
	3.41 – 4.20	Agree (A)	Positive (P)
	2.61 – 3.40	Moderately Agree (MA)	Neutral (Ne)
	1.81 – 2.60	Disagree (D)	Negative (N)
	1.00 – 2.60	Strongly Disagree (SD)	Very Negative (VN)

The table shows that clients have a very positive perception of online banking adoption, (w $\bar{x}$ = 4.68) for quick and hassle-free fund transfers, (w $\bar{x}$ = 4.67) for secure login/authentication, and (w $\bar{x}$ = 4.64) for convenient and user-friendly bill payment. Customer support (w $\bar{x}$ = 4.01), was seen as satisfactory but not as highly rated as other features.

Table 2.2 *Clients' Perceptions on the Factors Influencing the Adoption of Online Banking in terms of Technological Innovations and Advancements (n = 155)*

I adopted online banking because of the following:	w $\bar{x}$	VD	PI
1. Biometric authentication (e.g., fingerprint, facial recognition) has enhanced the security of online banking.	4.63	SA	VP
2. Contactless payments have improved my overall satisfaction with online banking.	4.48	SA	VP
3. Blockchain technology that ensures secure and transparent transactions has enhanced my confidence in using online banking.	4.38	SA	VP
4. The use of cloud computing for the enhanced data storage, security and scalability of online banking have significantly improved the efficiency and reliability of online banking.	4.31	SA	VP
Composite	4.45	SA	VP

Legend:	Scale	Verbal Description (VD)	Perception Interpretation (PI)
	4.21 – 5.00	Strongly Agree (SA)	Very Positive (VP)
	3.41 – 4.20	Agree (A)	Positive (P)

2.61 – 3.40	Moderately Agree (MA)	Neutral (Ne)
1.81 – 2.60	Disagree (D)	Negative (N)
1.00 – 2.60	Strongly Disagree (SD)	Very Negative (VN)

The data show that clients strongly agreed ($w\bar{x} = 4.63$) that biometric authentication enhances online banking security, reflecting a very positive perception. Contactless payments also received a strong agreement ($w\bar{x} = 4.48$), indicating they contribute significantly to user satisfaction. Blockchain technology ($w\bar{x} = 4.38$) and cloud computing ($w\bar{x} = 4.31$) were similarly rated as having very positive impacts on confidence and system reliability, respectively.

Table 2.3 *Clients' Perceptions on the Factors Influencing the Adoption of Online Banking in terms of its Perceived Usefulness and Perceived Ease of Use (n = 155)*

I adopted online banking because of the following:		$w\bar{x}$	VD	PI
1.	Online banking allows me to access my account information conveniently from anywhere and anytime.	4.70	SA	VP
2.	Navigating through the online banking platform is intuitive and easy.	4.61	SA	VP
3.	Online banking helps me manage my finances more effectively.	4.54	SA	VP
4.	I had a seamless user experience in monitoring my day-to-day transactions.	4.48	SA	VP
	Composite	4.58	SA	VP
Legend:	Scale	Verbal Description (VD) Perception Interpretation (PI)		
	4.21 – 5.00	Strongly Agree (SA)	Very Positive (VP)	
	3.41 – 4.20	Agree (A)	Positive (P)	
	2.61 – 3.40	Moderately Agree (MA)	Neutral (Ne)	
	1.81 – 2.60	Disagree (D)	Negative (N)	
	1.0 – 2.60	Strongly Disagree (SD)	Very Negative (VN)	

The table indicates that clients strongly agreed ($w\bar{x} = 4.70$) that the convenience of accessing account information anytime and anywhere is a key factor in adopting online banking. They also found the platform easy to navigate ($w\bar{x} = 4.61$), contributing to a very positive perception of usability. The effectiveness of online banking in financial management ($w\bar{x} = 4.54$) and the seamless experience in monitoring transactions ($w\bar{x} = 4.48$) further reinforced this perception.

Table 3.1 *Level of Clients' Online Banking Engagement in terms of Usage Frequency (n = 155)*

I use online banking when paying the following:		$w\bar{x}$	VD	PI
1.	Internet Bill	3.70	A	P
2.	Groceries	3.70	A	P
3.	Electric Bill	3.30	MA	Ne
4.	Water Bill	2.86	MA	Ne
5.	Credit Cards	2.78	MA	Ne
	Composite	3.28	MA	Ne
Legend:	Scale	Verbal Description (VD) Perception Interpretation (PI)		
	4.21 – 5.00	Strongly Agree (SA)	Very Positive (VP)	
	3.41 – 4.20	Agree (A)	Positive (P)	
	2.61 – 3.40	Moderately Agree (MA)	Neutral (Ne)	
	1.81 – 2.60	Disagree (D)	Negative (N)	
	1.00 – 2.60	Strongly Disagree (SD)	Very Negative (VN)	

The table shows that clients frequently use online banking to pay for internet bills and groceries, both with a mean rating of 3.70, interpreted as "Agree" and reflecting a positive perception. However, usage drops for electric bills ($w\bar{x} = 3.30$), water bills ($w\bar{x} = 2.86$), and credit card payments ($w\bar{x} = 2.78$), all falling under "Moderately Agree" with a neutral perception.

Table 3.2 *Level of Clients' Online Banking Engagement in terms of Customer Satisfaction (n=155)*

I adopted online banking because of the following:	$w\bar{x}$	VD	PI
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1. I am satisfied with the quality of service provided.	4.53	SA	VP
2. I can easily find information and guidance for completing my transactions online.	4.46	SA	VP
3. I have quickly set-up my account and easily became familiar with the platform.	4.42	SA	VP
4. I spend a reasonable amount of time navigating through the platform and completing my task.	4.35	SA	VP
5. I have observed that the platform loads and responds to my inputs quickly.	4.28	SA	VP
6. I have completed my transactions successfully without errors or delays.	4.14	A	P
7. I am satisfied with the prompt resolution of concerns raised.	4.12	A	P
8. Customer service team is knowledgeable.	4.12	A	P
9. I am satisfied with the interest rates, fees and charges.	4.02	A	P
10. I have rarely experienced technical errors, crashes or glitches that disrupt the service.	3.97	A	P
Composite	4.24	SA	VP

Legend:	Scale	Verbal Description (VD)	Perception Interpretation (PI)
	4.21 – 5.00	Strongly Agree (SA)	Very Positive (VP)
	3.41 – 4.20	Agree (A)	Positive (P)
	2.61 – 3.40	Moderately Agree (MA)	Neutral (Ne)
	1.81 – 2.60	Disagree (D)	Negative (N)
	1.00 – 2.60	Strongly Disagree (SD)	Very Negative (VN)

The table reveals that clients are highly satisfied with the quality of service ($w\bar{x} = 4.53$) and the ease of accessing transaction guidance ($w\bar{x} = 4.46$), both rated as “Strongly Agree” with a very positive perception. Quick setup and familiarization ($w\bar{x} = 4.42$) and efficient navigation ($w\bar{x} = 4.35$) further enhance user satisfaction. While some aspects like error-free transactions ($w\bar{x} = 4.14$) and customer service ($w\bar{x} = 4.12$) received slightly lower “Agree” ratings, they still indicate a positive experience.

Table 4.1 Relationship between the Factors Influencing the Adoption of Online Banking and the Clients' Online Banking Engagement ($n = 155$)

Relationship between Variables	r_s	P-value	Decision	Remark
Perceptions on Online Banking Features and Services and Online Banking Engagement	0.306	<.001	Reject H_{01}	Significant
Perceptions on Technological Innovations and Advancements and Online Banking Engagement	0.484	<.001	Reject H_{01}	Significant
Perceptions on Perceived Usefulness and Perceived Ease of Use and Online Banking Engagement	0.456	<.001	Reject H_{01}	Significant

Spearman Rank-Order Correlation at 0.05 Level of Significance

The table shows significant positive correlations between clients' perceptions and their online banking engagement. The strongest relationship was with perceptions on technological innovations and advancements ($r_s = 0.484$, $p < .001$), followed by perceived usefulness and ease of use ($r_s = 0.456$, $p < .001$). Perceptions of features and services also showed a moderate but significant correlation ($r_s = 0.306$, $p < .001$). Since all p-values were below 0.05, the null hypotheses were rejected, indicating that favorable perceptions significantly influence engagement with online banking.

Table 5. Difference in the Overall Perceptions of the Respondents on the Factors Influencing Adoption of Online Banking when Grouped according to Profile ($n = 155$)

Variables	Median	Comp. Value	p-value	Decision	Remark
Sex		U			
Male	4.50	2402	0.192	Fail to reject Ho ₂	Not significant
Female	4.54				
Marital Status					
Single	4.58	2182.5	0.364	Fail to reject Ho ₂	Not significant
Married	4.50				
Age		H			
21 – 25	4.50	1.662	0.646	Fail to reject Ho ₂	Not significant
26 – 30	4.67				
31 – 35	4.63				
> 35	4.42				
Educational Level					
HS Graduate/Vocational	4.54	1.916	0.384	Fail to reject Ho ₂	Not significant
College Graduate	4.58				
Post Graduate	4.75				
Employment Status					
Employed	4.58	1.923	0.382	Fail to reject Ho ₂	Not significant
Self-Employed	4.67				
Unemployed	4.67				

Mann-Whitney U Test and Kruskal-Wallis Test (H) at 0.05 Level of Significance

The results reveal that all p-values are greater than the level of significance (0.05). Consequently, the null hypothesis cannot be rejected. This indicates that clients, regardless of sex, marital status, age, educational level, or employment status, share similar perceptions regarding the adoption of online banking.

Discussion

A strong pattern emerged indicating that younger, educated, and employed individuals dominate online banking usage in Dumaguete. The largest segment of users fell within the 26–30 age group (38.71%), and females (64.52%) were more likely to engage in online banking. Notably, college graduates (74.84%) and the employed (80.64%) formed the majority, suggesting that online banking adoption is higher among digitally literate and economically active individuals. This indicates that a significant portion of users comprises millennials and Generation Z individuals, who are generally more adept at embracing technological innovations. According to Tan (2021), many millennials depend on online banking platforms to manage their personal finances. Similarly, Park et al. (2024) found that Generation Z's adoption of online banking is influenced by the compatibility and simplicity of these digital services. Gender differences also emerge in online banking usage patterns. Women are more inclined to utilize online banking services compared to men, with a heightened sensitivity to the aesthetic aspects of the platform, such as website design and color schemes. This preference aligns with studies suggesting that women place greater importance on the visual appeal of products and services than men (Tan, 2021). Online banking tends to attract single individuals more than those who are married. According to Ranabhat (2023), single people often possess more flexible schedules and might find online banking appealing since it allows them to handle their finances at any time and from any location without needing to visit a physical bank. Furthermore, Ranabhat et al. (2023) assert that educational attainment significantly impacts individuals' access to the internet, with older adults and those with lower education levels exhibiting less awareness of internet banking services. Additionally, Kose (2020) suggests that employment status plays a crucial role in the utilization of online banking tools, as employed individuals are more inclined to use these services compared to their unemployed counterparts. This is because employment status significantly influences perceptions toward the use of internet banking services (Ranabhat et al., 2023). This suggests that while most respondents have traditional employment, there is an equal but smaller proportion of individuals who are either seeking work or running their own businesses. According to Etim et al. (2023), with the use of online banking, no matter when and where they are, customers can easily and quickly access, monitor and make fund transfers online. Improving biometric authentication and blockchain security can enhance trust further. According to Starnawska (2021), this incorporation has enhanced operations and increased the security and efficiency of financial services. Singh (2019) states that cashless transactions provide a secure and convenient way to handle payments. Blockchain technology can remove intermediary roles, enhancing the transparency and traceability of transactions by optimizing, clarifying, and advancing the conventional operational methods of banks (Garg, 2021). As all transaction information

is stored at the bank terminal, users can use online banking without having to buy any software or backup devices (He et al., 2019). As Kaur (2021) claims that regardless of their location or the time of day, customers can securely and swiftly manage and review their finances online. This service allows users to access and manage their accounts whenever they wish and from anywhere, including during holidays, evenings, and nighttime (Kaur, 2021). This indicates that online banking solutions offer users enhanced flexibility in managing their financial matters. According to Prakosa, et al., (2021), online banking enhances customer experience by providing greater ease of use. Vebiana (2020) added that online banking provides numerous opportunities for financial institutions to enhance their services, including efficient and rapid financial solutions, cost-effective communication tools for customers, innovative banking products and services for clients, and better oversight of financial system errors. According to Alzoubi (2022), the convenience of paying for various bills, including phone bills, electricity charges, rent, and other similar expenses, is convenient and advantageous for everyone. As Sharma (2020) claims that the quality of services is positively connected with customer satisfaction and loyalty. Client satisfaction is consequently considered to be a predictor of service quality in order to develop a loyal client base. Banks that are less responsive to changes in the market and consumer preferences run the risk of losing clients. Nonetheless, a few small problems with technical performance and customer support response times point to areas that may be used to improve the overall experience. Service quality is often characterized as the gap between customer expectations and their actual experiences (Islam et al, 2020). Additionally, service quality is the ability to adjust to customer needs during service delivery and the results of customers' assessments by contrasting their expectations with the perceived quality received. Customer loyalty and satisfaction are positively correlated with service quality. In order to cultivate a devoted customer base, customer happiness is therefore thought to be a predictor of service quality (Sharma et al., 2020). Using Spearman Rank-Order Correlation, the results show that all p-values (< 0.001) are less than the level of significance (0.05). This indicates that the null hypothesis of no relationship between the variables is rejected. This means that clients' perceptions regarding (a) online banking features and services, (b) technological innovations and advancements, and (c) usefulness and ease of use are significantly related to their online banking engagement. This suggests that clients with positive perceptions of online banking adoption, particularly in the aforementioned areas, tend to engage more actively in online banking (Alkhowaiter, 2020; Carranza et al., 2021). These findings validate the central proposition of Technology Acceptance Model and Unified Theory of Acceptance and Use of Technology which are favorable perceptions that drive increased behavioral intent and usage. In contrast, Kruskal-Wallis Test and Mann-Whitney U Test results reveal that all p-values are greater than the level of significance (0.05). Consequently, the null hypothesis cannot be rejected. This indicates that clients, regardless of their demographic profile share similar perceptions regarding the adoption of online banking. Contrary to some existing literature, no statistically significant differences ($p > 0.05$) were found in perception scores when respondents were grouped by age, sex, marital status, education level, or employment status. This suggests a convergent acceptance pattern across demographic groups in Dumaguete, highlighting that functionality and perceived value of the service are more decisive than demographic identity.

Conclusion

This study confirmed that clients have very positive perceptions of online banking, especially in terms of technological innovations, perceived usefulness and ease of use, and overall customer satisfaction. Security features like biometric authentication and the convenience of accessing financial services online were major factors influencing adoption. Significant correlations were found between client perceptions and their level of engagement, highlighting that the more favorable the perception, the higher the usage and satisfaction. These findings support the core principle of the Technology Acceptance Model and the Unified Theory of Acceptance and Use of Technology, which posit that positive user perceptions significantly enhance behavioral intention and actual usage. Despite variations in usage frequency for specific transactions, the general attitude toward online banking remained positive across all demographic groups. While the study provided valuable insights, it had limitations. The sample was limited to 155 respondents, which may not fully represent the broader population of online banking users. The research also relied on self-reported data, which can be subject to response bias. Moreover, a study focused on behavioral or psychological motivations could also helped in further understanding the adoption of online banking. Future studies could expand the sample size and include more diverse geographic and socioeconomic backgrounds to enhance generalizability. Researchers might also explore post-adoption behaviors, such as long-term loyalty, security concerns, and user retention. Additionally, integrating qualitative methods—like interviews or focus groups—could provide richer insights into user experiences and preferences. Investigating the role of emerging technologies such as AI-driven banking tools and mobile applications may also offer new perspectives on the evolving landscape of digital finance.

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