2023

Predictors of Internet Banking Services Adoption among Depositors in Davao City, Philippines

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Date received: June 30, 2022
Date revised: April 11, 2023
Date accepted: July 31, 2023
Similarity index: 7%

Abstract

The Internet has transformed the face of banking in recent years. Client attitudes toward Internet banking depends on their perception of the services and the accompanying risks. Internet use has never been this indispensable, especially during lockdowns such as the COVID-19 pandemic. Hence, the study was undertaken to determine the factors that affect the level of usage of Internet banking services among depositors in Davao City, Philippines. A descriptive-correlational research design was employed to analyze the responses of 300 clients of five identified banks located within the first administrative district of Davao City. The survey data reveals that the respondents sometimes used Internet banking services; they considered themselves literate with Internet banking; they perceived Internet banking as convenient but were concerned about its service efficiency; they found Internet banking easy to operate but not that enjoyable; their priority concern was financial risk, followed by security and privacy. Findings further show a significant difference in the level of usage of Internet banking services when grouped by respondents' age, DOI adopter classification, highest educational attainment, operating system used, and primary source of awareness. Finally, the level of awareness and perceived ease of use significantly predict the level of usage of Internet banking services. Lack of onsite bank transactions due to restrictions may force the banking public to use the internet to do business. Banks may intensify their awareness campaign, further enhance their platforms, and address security and risk concerns to entice more clients to patronize Internet banking.

Keywords: internet banking, ease of use, internet banking services awareness, the Philippines

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https://doi.org/10.53899/spjrd.v28i2.200

Internet banking revolutionized how banks operate. Over the years, the banking industry has provided avenues for innovative services for both banks and clients through technological advancement. Banks are now more conscious of developing their web-based portals to educate clients about financial, privacy, and security risks.

The growing popularity of the Internet led banks to utilize it for the delivery of their products and services to clients (Premalatha, 2016). Internet banking is known by different names: cyber banking, Internet banking, virtual banking, internet-based banking, and e-banking (Khrais, 2013). Compared to other modes of electronic banking services, Internet banking is widely considered to be the most convenient, which offers almost all services and is easy to use. According to Karjaluoto (2013) in Kazi et al. (2015), all types of channels in electronic banking nowadays, except Internet banking, may be less effective and cannot play a crucial role in the banking sector. Above all, most electronic banking facilities cannot be used without an Internet connection.

These days, Internet banking users are able to pay utilities and taxes, manage investments, download account statements, inquire about balances, apply for bank loans, and engage in online share trading (Boshoff & Nel, 2014). Berger and Gensler (2007), in Nehemia et al. (2017), articulated that Internet banking can improve banks' profitability. Since the transactions are online, there is no longer a need to establish branches, especially in impractical locations. On the other hand, Tan and Teo (2000), in Al-Subari (2017), highlighted the ease of access with the claim that clients can transact wherever they are as long as there is an Internet connection. Nevertheless, incorporating Internet banking suggests significant advantages such as convenience, ease of use, less effort, and less time used compared to traditional banking (Jayawardhena & Foley, 2000, in Al-Subari, 2017).

Nehemia et al. (2017) underscored that some banks entice clients to use online banking by offering free bill payment services. The availability of 24/7 access allows clients to monitor their accounts and catch suspicious or fraudulent activities in real time. In Southeast Asia, the Philippines topped the list in terms of Internet usage with a daily average of 10 hours and 2 minutes of screen time (Lamb, 2019). Despite the rank, a survey by McKinsey and Company found that only 12% of Filipinos use Internet banking services compared to 28% recorded in other developing countries (Ramanathan et al., 2014).

In Jordan, although millions of dollars were invested in upgrading and maintaining Internet technology infrastructure, the adoption of Internet banking is still low (AlKailani, 2016). Jayasiri and Kariyawasam (2016) asserted that such low adoption primarily comes from a lack of awareness of how Internet banking works. Jarret (2015), in Josefsson (n.d.), further noted that the challenges the industry is facing include developing newer and faster software and addressing security issues.

Hojjati et al. (2015) claimed that people in Iran have not adopted Internet banking services primarily because they prefer to visit a physical branch. In addition, other reasons are their distrust of the Internet banking portal and lack of interest. Meanwhile, despite the increased usage of online banking in Malaysia, security issues persist due to the rising activities of scammers, as reported to cyber security authorities (Levi, 2016 in Al-Subari, 2017). Laforet and Li (2005), as cited in Perera and Sundara (2018), emphasized that the consumers' experiences influence their attitude toward Internet banking. They also mentioned that consumer behavior, demography, and motivation regarding banking technologies are the starting point toward consumer acceptance of technological innovation.

In the Asian market, the Philippines has the lowest utilization of Internet banking services. The use of smartphones to access digital banking has considerably lagged. Only 9% of Filipino consumers use smartphones to bank, compared with 26% in other developing countries in Asia. Cyber security is the most prevalent concern among Philippine banks due to a lack of security measures, including authentication and transaction signing to secure transactions (Salas & Soon, 2016). Further, according

DOI: https://doi.org/10.53899/spjrd.v28i2.200

to the Internet security firm Trend Micro as reported by ABS-CBN (2016) disclosed that security concerns on online banking in the country are rising.

Despite the growing interest in Internet use in the Philippines, financial institutions must push for more educational awareness regarding Internet banking facilities and services to motivate depositors to use Internet banking, as the success of technological innovation depends on its actual usage. Thus, there is a need to identify what affects its patronage.

The factors that affect usage of Internet banking were taken from the studies of Chawla and Segal (2012); Hanafizadeh and Khedmatgoza (2012); Ahmad and Bansal (2013); Boshof and Nel (2014); Ahmed et al. (2015); Yadav (2016); Farooqui and Rajana (2017); Nehemia et al. (2017); Perera and Sundara (2018), and Bansal and Joshi (2015). These factors include level of awareness, perceived usefulness, perceived ease of use, perceived risk, and perceived trust belief. These factors were likewise considered in the Technology Acceptance Model that perceived ease of use and perceived usefulness explain the user's behavior toward innovative technologies. Perceived Risk Theory explains that every behavioral activity involves risk. Theory of Reasoned Action, Diffusion of Innovation, Theory of Planned Behavior, Unified Theory of Acceptance and Usage of Technology, and Social Cognitive Theory suggest that awareness and perceived trust beliefs are also considered to explain the intention and subsequent usage of technological innovation. This means that these factors can explain the clients' usage of Internet banking to capture which support or hinder the adoption of Internet banking.

The study of Alajmi et al. (2018) revealed a weak relationship between perceived ease of use, perceived usefulness, and perceived trust belief. The study implies that these factors have a great role in predicting Internet banking adoption. Perceived trust belief reduces the perceived risk and enhances the likelihood of engagement, resulting in efficient transactions (Bisht & Kesharwani, 2012; Bow et al., 2012). Likewise, awareness reduces the risk of Internet banking usage (Hanafizadeh & Khedmatgoza, 2012).

The study by Lee, Kim, and Yuan (2010) noted that clients should be aware of their banks' products and services to increase Internet banking usage, as awareness is the initial stage of technology adoption. If there is a wide range of awareness, clients will discuss the advantages and disadvantages of Internet banking as awareness is a significant factor affecting Internet banking usage (Perera & Sundara, 2018; Nehemia et al., 2017).

Jerene and Sharma (2019) claimed that if a client perceives that Internet banking is manageable to use and that it improves its performance efficiency, their usage will likely increase. After all, perceived usefulness is a vital construct to increase the usage of Internet banking services (Perera & Sundara, 2018).

When Internet banking services become challenging, clients will find another way to make banking transactions (Lin et al., 2015). Furthermore, it is less likely that clients will utilize a banking system if they have difficulty in learning how to use it or find it difficult to use in general. Jahangir and Parvez (2012) and Mann and Sahni (2012) corroborated this idea and noted that the perceived ease of use affects Internet banking usage.

Hanafizadeh and Khedmatgozar (2012) posited that clients perceived the risks of potential financial loss caused by mistakes and the impossibility of bank compensation due to transaction errors. In addition, clients also worry about their private data when shared without their consent. Perceived risk is a major indicator hindering clients' Internet banking usage (Bisht & Kesherwani, 2012).

Amid the prevalence of Internet banking services, clients' lose their trust in the Internet banking portal due to a fear that other people might access their bank information and may take their money away (Nehemia et al., 2017). However, Normalini (2019) claims that if the web retailer has competence, integrity, and benevolence and has a high web quality, then there would be a potential development to improve the usage of clients of such services. Ahmad and Bansal (2013) noted that clients tend to assume that the banks' Internet banking portal can be trusted and will not engage in opportunistic behavior, affecting their trust in the web-based technology; hence, trust perception affects Internet banking usage.

Testing differences in demographics concerning Internet banking acceptance and usage are useful (AlKailani, 2016). Previous studies of Omotayo (2020); Mann and Sahni (2012); Serener (2016); Hayran et al. (2016); Alqershi et al. (2014); Nadeem et al. (2015); Ameme (2015); Teka (2017); Karjaluoto et al. (2002); Alt et al. (2012); and Jayasiri and Kariyawasam (2016) cited that age, sex, civil status, DOI adopter classification, gross monthly income, highest educational attainment, most preferred digital device, operating system used, primary source of awareness, and work industry are also important factors affecting clients' usage of internet banking.

Meanwhile, an upsurge of banking institutions has been observed in Davao City due to economic growth evidenced by the increasing number of registered businesses and the rise in health, education, tourism, infrastructure, and sports activities in its three administrative districts. These financial institutions offer Internet banking to serve their clients better. However, how Internet banking appeals to clients in Davao City remains to be discovered.

With the speed of digital transformation, more transactions, including banking, are being digitized. Knowing the current usage level of online banking services can help the banking industry and its allied sectors design promotional activities to educate the banking public. Adoption of online banking facilities can save time and person-hours. Consequently, it can mean more income for banks, which may contribute to the economic development of the region and the nation.

The improvement of Internet banking systems is vital in this information age. Technology use in financial transactions is seen to accelerate as clients seek convenience at their fingertips. Hence, the study dwells on the context of the Technology Acceptance Model and Perceived Risk Theory to better assess the factors that foster the use of Internet banking. Specifically, the study looks into the clients' profile; level of awareness and their perceptions on usefulness, ease of use, risk, and trust belief; level of usage of internet banking services; significant difference in the level of usage of Internet banking services when grouped according to their profile; significant relationship between the factors of adoption and the level of usage of Internet banking services, and the factors that affect the respondents' level of usage of Internet banking services.

Theoretical Framework

Banking via the Internet provides clients with a convenient way of controlling their accounts 24/7; however, based on the review of literature on Internet banking, the usage of Filipinos significantly lags behind other developing countries. By examining which of these constructs, such as awareness, perceived usefulness, perceived ease of use, perceived risk, and perceived trust belief, best predicts what hinders or supports Internet banking usage among clients contributes to the improvement of the web-based platform among banking institutions and increase their clients' patronage.

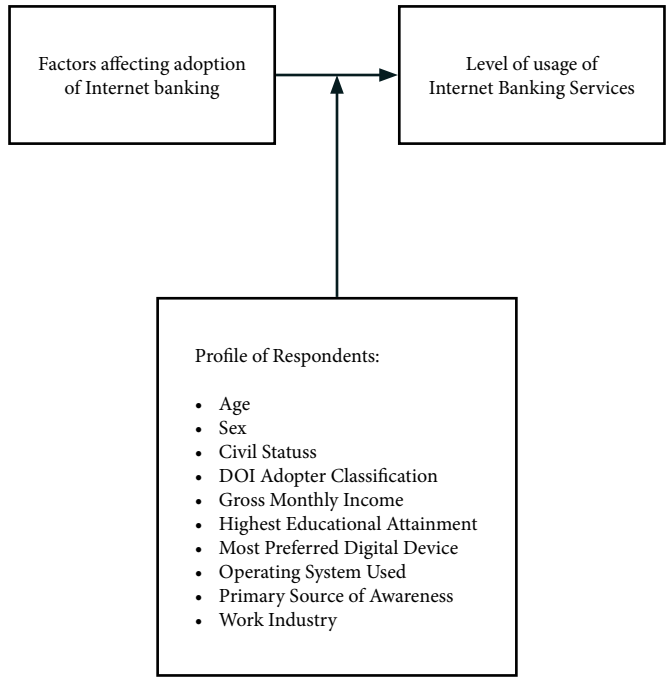
The study is anchored mainly on the Technology Acceptance Model (TAM). Presented in Figure 1 is the conceptual framework of the study. The independent variable includes five constructs representing the factors affecting the adoption of Internet banking: level of awareness, perceived usefulness, perceived ease of use, perceived risk, and perceived trust belief. The dependent variable is

DOI: https://doi.org/10.53899/spjrd.v28i2.200

the level of usage of Internet banking services. Additionally, the moderating variable is the profile of respondents with indicators such as age, sex, civil status, DOI adopter classification, gross monthly income, highest educational attainment, most preferred digital device, operating system used, primary source of awareness, and work industry.

Figure 1

Conceptual Framework of the Study



Methodology

The study employed a quantitative research design and applied a descriptive-correlational method. Descriptive method highlights the profile of respondents and the factors for adopting Internet banking, such as awareness, perceived usefulness, perceived ease of use, perceived risk, perceived trust belief, and usage of Internet banking services. Correlational method measures the relationship between the factors affecting Internet banking and the level of usage of Internet banking services; this determines which factors affecting the adoption of Internet banking services significantly influence the level of usage of Internet banking services. The survey method, through a questionnaire, was an effective tool to collect data from respondents.

The study collected survey data from primary sources, surveying 300 bank clients of the most prominent branches of the top 5 banks in the First Administrative District of Davao City in terms of assets. The first district was purposively chosen as the major banks and their big branches are situated in the area. Also, banks with substantial assets have more resources to tap to develop their Internet banking portals. Data was collected during the first quarter of 2021. Since the number of depositors

of the bank/branch cannot be obtained due to confidentiality, Cochran's (1963) equation was used at a 90% confidence interval. The 300 samples were distributed equally among the five banks or branches, with 60 respondents per bank. Systematic sampling was applied in identifying respondents. Depositors' priority number was used. The value of *k* is *5* (300/60 per branch). Five pieces of paper were numbered 1-5, and the start number picked randomly was 3. The depositor with a priority number of 3 was the first sample, followed by every 5th depositor until the desired number of samples was obtained in each bank/branch. With the help of bank employees, the researcher distributed the survey questionnaires to clients. Upon completion, the researcher retrieved the instruments.

The study utilized a self-constructed survey questionnaire for its data gathering purposes. The questionnaire was subjected to validity and reliability tests prior to administration. Content validation of the research instrument was done by three (3) experts holding doctorate degrees in business and management. On a scale of 1 to 5, with 5 as the highest rating, the experts gave an overall mean rating of 4.14. Reliability testing was administered to a sample of 30 respondents from another population. The survey questionnaire yeilded a Cronbachs' coefficient alpha for internal consistency of 0.914 for Level of Awareness, 0.919 for Perceived Usefulness, 0.912 for Perceived Ease of Use, 0.858 for Perceived Risk, 0.899 for Perceived Trust Belief, and 0.825 for Level of Usage of Internet Banking Service.

A 5-point Likert scale was used to determine the levels of awareness, perceived usefulness, perceived ease of use, perceived risk, and perceived trust beliefs, as well as the level of usage of Internet banking services.

Statistical tools used to analyze the data are as follows: Frequency Count and Percentages for respondents' profile; Weighted Mean for the level of awareness, perceived usefulness, perceived ease of use, perceived risk, perceived trust belief, and level of usage of Internet banking services among respondents; Independent Sample *t*-test and Kruskal-Wallis *H* test for significant difference in respondents' perception of factors affecting adoption of Internet banking and level of usage of Internet banking services when analyzed according to profile; Spearman's rho correlation for relationship between factors affecting adoption of Internet banking and level of usage of Internet banking services; and Multiple Linear Regression Analysis to identify the factors that significantly affect the level of usage of Internet banking services. Stepwise regression was applied to find the best multiple regression model. Assumptions were performed before conducting regression analysis. The analysis revealed no multicollinearity in the data; the relationship between independent variables and dependent variables is linear; the variance of residuals is constant; and the values of residuals are normally distributed and independent. Thus, conditions are met to proceed with the regression analysis.

Results and Discussion

Profile of Respondents. The survey revealed that majority of the respondents are 30 years old and below; female; single; classified as early adopters and early majority; have gross monthly income of no more than PhP25,000; are bachelor's degree holders; prefer to use smartphone, tab or pad; are android users; and about 20% are from finance and real estate industries. They indicated bank officials/employees, friends/relatives, and online advertisements as their primary sources of awareness of Internet banking. This is elaborated in Table 1.

DOI: https://doi.org/10.53899/spjrd.v28i2.200

Table 1

Profile of Respondents

Profiles		Frequency	Percentage (%)
Age	less than 25	103	34.3
	26-30	129	43
	31-40	51	17
	41-50	13	4.3
	51 and above	4	1.3
Total		300	100
Sex	Male	138	46
	Female	162	54
Total		300	100
Civil Status	Single	228	76
	Married	66	22
	Separated	3	1
	Widow/Widower	3	1
Total		300	100
DOI Adopter Classification	Innovator	37	12.3
	Early Adapter	100	33.3
	Early Majority	118	39.3
	Late Majority	29	9.7
	Laggards	16	5.3
Total		300	100
Gross Monthly Income	up to 15,000	87	29
	15,001 to 25,000	130	43.3
	25,001 to 35,000	43	14.3
	35,001 to 45,000	19	6.3
	45,001 to 55,000	13	4.3
	more than 55,0001	8	2.7
Total		300	100
Highest Educational Attainment	High School Graduate	16	5.3
	Vocational Course Graduate	6	2
	Bachelor's Degree	252	84

Profiles		Frequency	Percentage (%)
	Master's Degree	22	7.3
	Doctorate Degree	4	1.3
Total		300	100
Most Preferred Digital Device	Computer	23	7.7
	Laptop	33	11
	Smartphone, tab or pad	244	81.3
Total		300	100
Operating System Used	Android	202	67.3
	iOS	98	32.7
Total		300	100
Primary Source of Awareness	Bank Officials/Employees	78	26
	Friends/Relatives	78	26
	Online Advertisement	87	29
	Print Media	17	5.7
	TV and Radio	25	8.3
	Vlogs	2	0.7
	Others	13	4.3
Total		300	100
Work Industry	Academe	25	8.3
	Agriculture	22	7.3
	Banking	28	9.3
	BPO	10	3.3
	Construction	11	3.7
	Consultancy	10	3.3
	Cooperative	6	2
	Customs Brokerage	6	2
	Finance and Real Estate	59	19.7
	Food and Beverage	8	2.7
	Government	23	7.7
	Healthcare	13	4.3
	Legal	12	4
	Media	9	3
	Mining	4	1.3
	Printing Services	3	1

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Profiles		Frequency	Percentage (%)
	Professional Services	6	2
	Retail/Wholesale Services	13	4.3
	Social Welfare and Rehabilitation	4	1.3
	Telecommunication	14	4.7
	Transportation	3	1
	Others	11	3.7
Total		300	100

Factors Affecting Adoption of Internet Banking

The respondents assessed their level of awareness and perception of usefulness, ease of use, risk, and trust belief in Internet banking using a 5-point Likert Scale from strongly agree (5) to strongly disagree (1).

It was found that respondents are literate in terms of Internet banking and are considerably aware of the facility. With regard to usefulness, respondents agree that Internet banking is considerably useful and convenient but are concerned about its service efficiency in meeting their needs. Also, respondents confirm that they find Internet banking considerably easy to operate but not enjoyable. Further, respondents found Internet banking as considerably risky, citing financial risk, security, and privacy concerns. They have a high level of trust belief in terms of the benevolence of the banks' Internet banking services. These findings are summarized in Table 2.

Table 2

Summary of Factors Affecting Adoption of Internet Banking

Factor	Overall Mean	Descriptive Equivalent
Level of Awareness	4.1922	Considerably Aware
Perceived Usefulness	4.2878	Considerably Useful
Perceived Ease of Use	3.9800	Considerably Easy
Perceived Risk	3.8656	Considerably Risky
Perceived Trust Belief	3.8000	High

Legend: 4.50-5.00 - Extremely (Strongly Agree; Very High); 3.50-4.49 - Considerably (Agree; High); 2.50-3.49 - Moderately (Moderately Agree; Moderately High); 1.50-2.49 - Slightly (Disagree; Low); 1.00-1.49 - Not at all (Strongly Disagree; Very Low)

The study of Polatoglu and Ekin (2001) established that those with high familiarity with the internet find internet banking simple while enjoying great benefits such as 24/7 access and time savings (Pew, 2003 as cited in Hosein, 2009). Meanwhile, Nehemia et.al (2017) and Bansal and Joshi (2015) highlighted that an easy-to-operate system and its good appearance enables customers to exert less mental effort leading them to enjoy doing financial transactions. In addition, Perceived risk must be minimized in order to maximize Internet banking usage (Bisht & Kesharwani, 2012 in Santoso & Murtini, 2014).

Hanafizadeh and Khedmatgozar (2012) stressed that the cause of potential loss resulting from

fraud and the risk of hacking is the lack of the web portal's security. Also, Polatoglu and Ekin (2001) pointed out that people with less experience in performing financial transactions over the Internet find it hard to use. Alajmi et al. (2018) highlighted the importance of trust in the clients' intent to adopt Internet banking while Begum and Jahangir (2008) noted that internet banking will likely be patronized if the perceived usefulness is high. In circumstances where the service quality does not meet customers' expectations, the financial institution is considered indifferent to its customers (Perera & Sundara, 2018).

Level of Usage of Internet Banking Services

Table 3 shows that respondents use Internet banking services only sometimes. This implies that they prefer traditional banking. According to Hojjati, Monavvarian, and Roozbahani (2015), people do not adopt Internet banking because they prefer to visit a physical branch, do not have enough trust in the Internet banking portal, and are not interested in the facility.

Table 3

Level of Usage of Internet Banking Services

Factor	Overall Mean	Descriptive Equivalent
Internet Banking Services	3.1907	Sometimes Used

Legend: 4.50-5.00 - Extremely (Strongly Agree; Very High); 3.50-4.49 - Considerably (Agree; High); 2.50-3.49 - Moderately (Moderately Agree; Moderately High); 1.50-2.49 - Slightly (Disagree; Low); 1.00-1.49 - Not at all (Strongly Disagree; Very Low)

Difference in the Level of Usage of Internet Banking Services when Grouped According to Respondents' Profile

This study applied an independent sample *t*-test and Kruskal-Wallis to determine if there is a significant difference in the level of usage of Internet banking services when respondents are analyzed by profile. Findings disclosed that there is a significant difference in the level of usage of Internet banking services as to age, DOI adopter classification, highest educational attainment, operating system used, and primary source of awareness, and no significant difference when analyzed according to sex, civil status, gross monthly income, most preferred digital device, and work industry. This result is displayed in Table 4.

Table 4

Test of Difference in the Level of Usage of Internet Banking Services According to Profile

Profile	Test Statistics	*P* value	Interpretation
Age	K-W=13.993	0.007	Significant
Sex	t=-0.250	0.803	Not significant
Civil Status	K-W=7.297	0.063	Not Significant
DOI Adopter Classification	K-W=19.993	0.001	Significant
Gross Monthly Income	K-W=8.042	0.154	Not significant
Highest Educational Attainment	K-W=27.825	0.000	Significant

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Profile	Test Statistics	*P* value	Interpretation
Most Preferred Digital Device	K-W=3.196	0.202	Not significant
Operating System Used	t=-2.102	0.036	Significant
Primary Source of Awareness	K-W=14.706	0.023	Significant
Work Industry	K-W=23.065	0.341	Not significant

Findings show that the Internet banking usage of respondents over 50 years old is significantly different compared to those aged 41 to 50. This is consistent with the study of Omotayo (2020), which disclosed that clients less than 51 years old have higher technological experience and advancements.

Further, it was unveiled that innovators, early adopters, and the early majority use Internet banking significantly more often than laggards. This supports the study of Mann and Sahni (2012), which emphasized that innovators are eager to acknowledge Internet banking services since they consider them simple and easy to use.

The bachelor's, master's, and doctorate degree holders were found to have significantly higher levels of Internet banking usage than high school graduates, reinforcing that the potential adoption of Internet banking among clients increases with higher levels of educational attainment (Serener, 2016) and those with higher education were more inclined to use payment methods of Internet banking services (Kim et al., 2005).

Results also show that Android users have a lower level of patronage than iOS users due to security concerns (Hayran et al., 2016), problems in the signing process, permission system, and quick vetting process whereas iOS handles those issues very well because it has strict controls over its operating system, hardware, and applications (Alqershi et al., 2014).

The level of awareness of clients whose primary source of information is bank officials/employees is significantly different than those who were informed through other means. Nadeem et al. (2015) stated that banks use radio, newspaper, TV, and other platforms to increase public awareness.

Findings that sex does not bring a significant difference in the level of usage of Internet banking services were consistent with the study of Ameme (2015) but contrary to the papers of Teka (2017), Kumar (2015), and Riquelme and Rios (2010). This implies that sex does not significantly affect clients' patronage of Internet banking services. Likewise, civil status shows no significant difference in the level of usage of Internet banking services, affirming the studies of Lee et al. (2020) and Karjaluoto et al. (2002). Results that gross monthly income does not result in a significant difference in the level of usage of Internet banking services are consistent with the findings of Teka (2017) and Kumar (2015), implying that the respondent's wage is not a factor to the usage of the facility. That the most preferred digital device does not bring significant difference contradicts the study of Alt et al. (2012), which disclosed that digital devices could affect clients' willingness to patronize Internet banking services. Findings that the work industry has no significant difference in Internet banking usage belies the study results of Perera and Sundara (2018) and Jayasiri and Kariyawasam (2016).

Relationship Between the Factors Affecting Adoption of Internet Banking and the Level of Usage of Internet Banking Services

This study performed a test of relationship using Spearman's rho correlation between the level of usage of Internet banking services and the factors of Internet banking adoption such as level of

awareness, perceived usefulness, perceived ease of use, perceived risk, and perceived trust belief. As displayed in Table 5, significant relationships were noted between the level of usage of Internet banking services and the level of awareness, perceived usefulness, perceived ease of use, and perceived trust belief. There was no significant relationship between perceived risk and the level of usage of Internet banking services.

Table 5

Test of Relationship between the Factors Affecting Internet Banking Adoption and the Level of Usage of Internet Banking Services

Factors	**Level of Usage of Internet Banking Services**			
	Spearman's rho	***P* value**	**Strength of Correlation**	**Interpretation**
Level of Awareness	0.354	0.000	Weak	Significant
Perceived Usefulness	0.345	0.000	Weak	Significant
Perceived Ease of Use	0.355	0.000	Weak	Significant
Perceived Risk	-0.014	0.806	No relationship	Not Significant
Perceived Trust Belief	0.338	0.000	Weak	Significant

Legend: ± 0.81 to ± 1.00- Very Strong; ± 0.61 to ± 0.80- Strong; ± 0.41 to ± 0.60- Moderate; ± 0.21 to ± 0.40- Weak; ± 0.00to ± 0.20- Weak to no relationship.

Results reveal that, generally, the correlation is weak between the factors affecting the adoption of Internet banking and the level of usage of Internet banking services. Specifically, there is a weak significant relationship between the level of awareness of Internet banking and the level of usage. Ahmad and Bansal (2013) highlighted the study of Polatoglu and Ekin (2001), confirming that clients with high internet banking knowledge and skills find it easier to use the Internet facility. The results also relate to the study of Alzubi, Al-Dubai, Farea (2017), and Padachi, Rojid, and Seetanah (2007), which disclosed that the level of awareness has a significant relationship with intent and actual use of Internet banking services.

Moreover, perceived usefulness has a weak significant relationship with the level of usage of Internet banking services. Gerrard and Cunningham (2003) found that perceived usefulness is primarily dependent on services and fees offered by banks. Moreover, Perera and Sundara (2018) stated that perceived usefulness is crucial to Internet banking.

Further, perceived ease of use has a weak significant relationship with respondents' level of usage of Internet banking services. This concurred with the study of Josefsson (n.d.) that the use of Internet banking services has a significant relationship with ease of use. He added that to gain full acceptance, innovation must be easy to use. The paper of Wang et al. (2003) likewise disclosed that perceived ease of use and patronage of online banking are strongly correlated.

Furthermore, perceived trust belief has a weak significant relationship with the level of usage of Internet banking services. The findings of Alajmi et al. (2018) pointing to trust as an essential aspect of Internet banking and translates into speedy adoption and acceptance is supported by this study. Huang, Hsieh, and Liao (2016) and Boshof and Nel (2014) claimed that trust is an essential factor as it is central to successful business relationships and transactions and is key in online commerce.

DOI: https://doi.org/10.53899/spjrd.v28i2.200

In this study, perceived risk is not significantly correlated with the level of usage of Internet banking services. The result contradicts the findings of Ahmad and Bansal (2013) and Fadare (2016).

Factors Affecting the Level of Usage of Internet Banking Services

Multiple regression analysis was applied to identify which factors affecting the adoption of Internet banking determine the level of usage of Internet banking services among respondents. As exhibited in Table 6, only the level of awareness and perceived ease of use are significant predictors of Internet banking adoption. These factors explain that most clients are literate and knowledgeable regarding the services and advantages of Internet banking. Clients favor the user-friendliness of bank portals while enjoying ease of operation when navigating the website.

Table 6

Significant Factors Affecting the Level of Usage of Internet Banking Services

Predictors	*B*	Std. Error	Beta	*t*	Sig.
Constant	0.911	0.263		3.466	0.001
Level of Awareness	0.262	0.077	0.231	3.426	0.000
Perceived Ease of Use	0.297	0.073	0.274	4.068	0.001

The regression coefficients explain that, holding other variables constant, for every unit increase in the level of awareness and perceived ease of use of respondents, the usage level of Internet banking services will increase by 0.262 and 0.297, respectively. Thus, the resulting multiple regression equation for the level of usage of Internet banking services is:

Level of Usage of Internet Banking Services = 0.911 + 0.262 (Level of Awareness) + 0.297 (Perceived Ease of Use)

The findings that the level of awareness significantly affects the level of usage of Internet banking services complements the studies of Alzubi et al. (2017) and Nehemia et al. (2017), which indicated that the use of Internet banking services is a relatively new experience to many people, hence, the low adoption. As agreed qualitatively by Tarhini, Mgbemena, Trab, and Masadeh (2015), some clients know about the platform but do not pay enough attention because they lack awareness of its benefits. The Financial Inclusion Survey in 2021 conducted by the Bangko Sentral ng Pilipinas (BSP) (2021) revealed that lack of awareness was the main reason clients do not use the internet and other electronic platforms to perform financial transactions. In addition, perceived ease of use significantly affects the level of usage of Internet banking services. This result supports the works of Lin et al. (2015) and Nehemia et al. (2017), which disclosed that the more complicated the system is, the less likely it will be used. However, the findings of Yadav (2016) and Kumar et al. (2015) contradict the study results. They concluded that perceived ease of use does not influence the intention and actual use of Internet banking services. This was validated qualitatively by Tarhini et al. (2015), who stressed that clients familiar with the internet make them confident to do Internet banking with ease.

The factors of perceived usefulness, perceived risk, and perceived trust belief do not significantly affect the level of usage of Internet banking services.

Conclusion

Results of the study revealed significant differences in the level of usage of Internet banking services when respondents were grouped according to age, DOI adopter classification, highest educational attainment, operating system used, and primary source of awareness. On the other hand, no significant differences were established with regard to sex, civil status, gross monthly income, most preferred digital device, and work industry. However, the significant relationship between the level of awareness, perceived ease of use, perceived usefulness, perceived trust belief, and the level of usage of Internet banking was found to be weak. Although, in terms of perceived risk no significant relationship was established, the level of awareness and perceived ease of use significantly predict the level of usage of Internet banking among respondents. In conclusion, this study has substantiated that the Technology Acceptance Model (TAM) in the context of Internet banking services is further validated by the inclusion of an additional factor: awareness.

The results imply that more awareness or education is necessary to increase the level of usage of Internet banking among respondents. With the acceleration of digitalization of transactions, the need for more awareness of Internet banking services as well as its risks and benefits have become evident to increase patronage and protection among the client-respondents. Further study is recommended to cover different districts of Davao City or its nearby provinces with a larger sample size.

DOI: https://doi.org/10.53899/spjrd.v28i2.200

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