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Dimensions in the Adoption of Philippine Tax E-Payment Channels in Paying Income Taxes Among Individual Taxpayers

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ABSTRACT: Time has entered the digitized era where electronic systems have penetrated transactions, including taxation, simplifying processes among taxpayers for better revenue collection. With the aim of helping tax authorities in administering revenue collection, the study determines the factors influencing the adoption of the Philippines tax e-payment channels in paying income taxes among individual taxpayers and develop a research framework that illustrates the relevance and structure of the extracted factors. Using the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT) as a guide model, the study applies the quantitative research method as the research design. The assumption of the adoption of e-payment channels in paying income taxes among individual taxpayers is multifaceted that is based on the perception of the relative technology system. An Exploratory Factor Analysis (EFA) was employed to analyze a dataset of 110 respondents using random sampling collected through modified questionnaires. The study revealed that perceived usefulness, perceived benefit, perceived trust, social influence, facilitating conditions, and perceived cost influence the adoption of the BIR e-payment channels in paying income taxes among individual taxpayers in Davao City.

Keywords: Tax E-Payment, Factor Analysis, Individual Taxpayers, Technology Acceptance Model, Unified Theory Of Acceptance And Use Of Technology

INTRODUCTION

The COVID-19 pandemic in the Philippines has emphasized digitized tax administration to help the country recover economically (National Tax Research Council, 2020). According to the (Department Finance, 2021), only 17 to 24 percent represent electronic payers from the total number of taxpayers in 2020, with an increase of 44 percent in revenue collection by the Bureau of Internal Revenue through electronic payment channels. A country diagnostic report discussed that many Filipino adults still are accustomed to manual cash transactions with no intention of shifting to digital payments (Better Than Cash Alliance Philippine Country Diagnostic, 2019).

Despite slowly adopting the digitized economy and in the middle of the pandemic, there are still drivers for an electronic payment system failure that challenges limited acceptance by users (Simatele, 2021).

The usage of electronic systems in the contemporary era in simplifying and automating processes has become essential such as the tax payment process in the digital age (Palas et al., 2019). Moving forward to a digitized economy entails pertinent transactions, including payments for merchants, remittances, utility payments, social benefit transfers, and supplier payments on which businesses in the Philippines could save 20 to 45 billion annually (Better Than Cash Alliance Philippine Country Diagnostic, 2019). In addition, taxation is the tool for economic recovery that has been a great challenge ever since the outbreak of the COVID-19 pandemic (Nwaeze, 2022). In a research congress, (Ching, 2017) presented in her study that the government has provided channels in trying to improve the usage of electronic payment systems as part of its National Strategy for Financial Inclusion, based on the privacy, trust, security, and general preferences of the Filipino citizens.

The study of (Soneka & Phiri, 2019) expresses the significance of evaluating technology acceptance levels, such as the online tax system, for further technology implementation. In their study, significant determinants such as perceived risk, perceived accessibility (ease of use), and perceived productivity and effectiveness (usefulness) influenced the respondents to adopt electronic tax filing and payment systems in Zambia. Even before the onset of the pandemic, a study finding by (Kishura, 2020) about the revenue collection in Tanzania revealed an increased performance after introducing the e-payment system. Furthermore, a study by (S. K. Singh, 2020) during the pandemic concluded a positive relationship between e-payment and revenue collection, revenue sources monitoring, and financial reporting.

The shift towards digital payment in the "New Economy" environment has become imperative in the Philippines (Bangko Sentral Pilipinas, 2022). Tax collection as a form of financial resource ensures that every country is functioning satisfactorily and administering fiscal sovereignty, which became pertinent in the time of crisis today (Kovac & Klun, 2021). However, even with supporting approval from the Philippine government, many Filipinos still depend on cash and cheque (Ching, 2017). Considering the implication in the recovering economy of our country, the researchers decided to study the significant factors influencing the adoption of BIR e-payment channels in paying income taxes among individual taxpayers in the Philippines.

Two theories were used in the study, namely the "Technology Acceptance Model" and the "Unified Theory of Acceptance and Use of Technology." The Technology Acceptance Model is one of the most well-used theories to determine the user's behavior regarding technology systems acceptance. It is proposed by (Davis, 1985) to determine the individuals' acceptance, usage, and adoption of new information technology systems among users. This theory features two theoretical constructs that induce the users' adoption: perceived usefulness and ease of use that significantly affect the user's attitude and behavioral intention in using newly introduced technology systems that predict user acceptance. The theory concluded that the identified constructs are significantly

correlated with the current self-reported and future self-predicted usage of new technology systems which are pivotal in understanding the acceptance and behavior of end-users upon a new system being introduced (Najib & Fahma, 2020). The primary purpose of this theory is to provide a theoretical basis for pursuing the influence of variables on the users' perceptions, attitudes, and behavioral intentions to predict the future use or adoption of the technology system (Olushola & Abiola, 2017).

This theory has been widely applied by many researchers that have given innovation and new technology adoptions, further establishing expanded frameworks and models by modifying the original constructs to analyze and resolve specific research problems (Ibidunmoye, 2018). Moreover, it has been modified and expanded by (Venkatesh & Davis, 2000), referred to as TAM 2, which studies how the original constructs, precisely the perceived usefulness and adoption intention, are affected by the motivational social influence approaches and cognitive instrumental determinants in the workplace. Meanwhile, a further extension of this acceptance and adoption model referred to as TAM 3 was conducted by (Venkatesh & Bala, 2008) to focus on management support and interventions and their effects on the adoption and usage of newly introduced information technology systems in the workplace. Specifically, this model's proposed modifications and antecedent studies are relevant to determining the diverse phenomena of mobile payment system adoption and provide an in-depth view of the literature (Herget & Steinmüller Krey, 2021).

(Sondakh, 2017) noted that this theory is helpful in studies regarding technology acceptance and adoption that aim to explain the behavior of the users over new technologies and systems being introduced to a wide variety of end-users of technologies. It provides a well-defined understanding of the variables used in the study as it is also easy to apply and analyze, especially in determining the factors affecting the online tax payment system adoption (Othman, 2012). Moreover, this theory shows a fundamental basis in which a taxpayer's behavior regarding the usage of tax systems like BIR e-payment channels is induced as his beliefs enhance over time, which affects tax compliance (Night & Bananuka, 2019).

The Unified Theory of Acceptance and Use of Technology (UTAUT) as proposed by (Venkatesh et al., 2003) aims to determine the users' behavioral intention and intended use of the newly introduced information technology systems within the organization that would suffice the users' acceptance and adoption. It highlights four independent determinants: performance expectancy, effort expectancy, social influence, and facilitating conditions. It is also further constrained by the user's differences, namely, age, gender, experience, and voluntariness of use. These are significant in solving phenomena that identify the motivation to adopt a technology system (Shafie et al., 2020). This theory was based on the preexisting technology acceptance theories available that were empirically synthesized to integrate the salient findings, features, and constructs relevant to determining the end user's behavior towards specific technology systems within the organization, particularly the employees who are the primary users of such advancement mechanisms (Yavwa & Twinomurinzi, 2018).

Specifically, this theory has been extended further to emphasize the objectives of diverse phenomena regarding technology acceptance, predict the use of technology systems, and give significant findings to develop a unified system that would reach a broad range of technological users (Blut et al., 2022). (Williams et al., 2011) indicated that UTAUT developers aspire that future technology acceptance and adoption studies would use this unified model to better understand the exploration of information technology adoption and need not integrate variables and constructs from diverse theories. Consequently, (Venkatesh et al., 2012) modified this theory called UTAUT 2, incorporating three additional factors - hedonic motivation, price value, and habit that believe in improving the determination of the consumers' intention and usage behavior relating to the adoption of technology systems which the original model did not precisely detail as it highlights the organizational settings (Dwivedi et al., 2020).

However, (Dwivedi et al., 2019) noted that the moderating variables recognized in UTAUT might only be suitable for some technology adoption studies. Other propositions of these variables are established to refine the model's limitations and resolve the specific technological acceptance phenomena. According to (ANN et al., 2021), this model is considered a successful theory in determining technology usage, acceptance, and adoption because it explains 70% variance in acceptance and user behavior that identified several social and organizational factors as significant factors to influence the user adoption in organizational settings and consumers' perspectives. Whereas, (Junadi & Sfenrianto, 2015) specified that this theory could help explore the perceptions of different users regarding the adoption of e-payment systems as it provides an efficient and reliable basis to thoroughly explain the significance of the context that influences the development of service technology systems.

METHOD

This study used the quantitative research method using an exploratory factor analysis research design. The quantitative research method examines the relationships of the variables in a research phenomenon utilizing numerical data and statistical measures (Creswell, 2009). Additionally, the exploratory factor analysis determines the underlying structure of the factors influencing the variables. It aims to avoid data redundancy as the items of the factors are reduced to more minor significant meanings by getting the variances and relationships of the factors (Yong & Pearce, 2013). It is the appropriate method to determine the underlying structure of the factors to identify whether these factors are inter-correlated and sufficiently significant with the adoption to use the digital payment system in paying income taxes (Watkins, 2018).

Individual taxpayers are the primary respondents of this research. These include single proprietors, professionals, and mixed-income earner taxpayers in a defined population. The researchers used simple random sampling, a probability sampling that chooses a sample in which all the population members will be given an equal chance to be selected as respondents. In addition, the sample size of the population is 110 individual taxpayers who opted to pay their income taxes using BIR e-

Payment channels. (Memon et al., 2017), a sample size of 100 is suitable and appropriate for an exploratory factor analysis following the sample-to-item ratio.

This study used questionnaires from published literature of several studies in designing a survey questionnaire as a guide. Then, the developed questionnaire was used in conducting the focus group discussion to polish the design of the survey questionnaire adapted for this study. The validation of the research instrument was composed of two parts. The first part employed the focus group discussion (FGD) of three (3) respondents participating. These participants were selected upon their socio-demographic profile. Overall, there were a total of 63 questions used in conducting the focus group discussion. Furthermore, upon the conduct of the FGD, a specific number of item questions were identified. These questions became the modified questionnaire used in administering the pilot test to examine its validity further.

The research advisor approved the initial 63-item questions to check their validity. A specific number of participants were selected for the pilot testing to assess the instrument's reliability. Right after the Focus Group Discussion (FGD) with the expert, it revealed and identified 60 final scale items to run for pilot testing to examine whether these scale items collected by the research proponents are suitable for the data gathering phase. Moreover, the instrument's structure was measured using a five-point Likert-type scale which equates to 5 as Strongly Agree, 4 as Agree, 3 as Neutral, 2 as Disagree, and 1 as Strongly Disagree. Figure 1 below shows the instrument development process of determining the factors influencing the adoption of Philippines e-payment channels in paying income taxes.

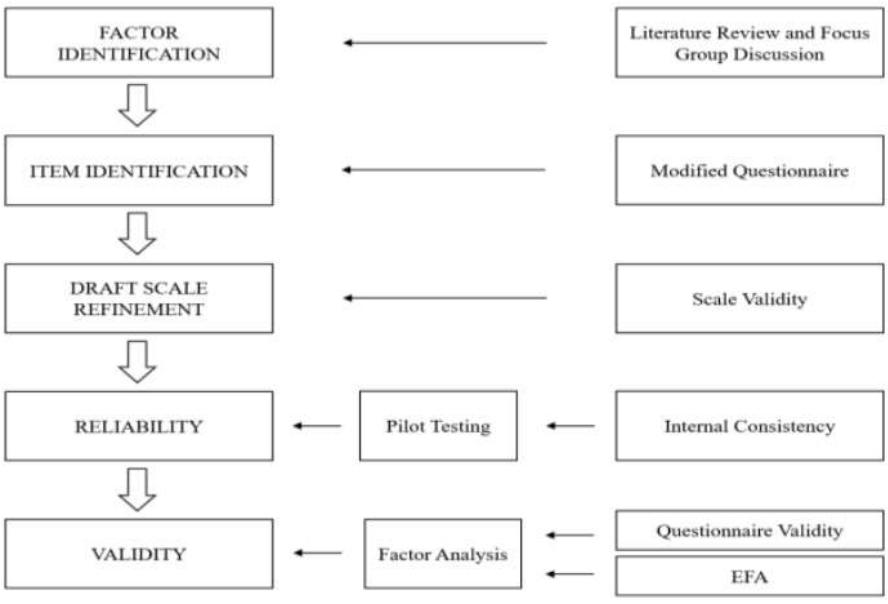


Figure 1: The Research Instrument Development Process

RESULT AND DISCUSSION

In Table 1, the Kaiser Meyer – Olkin's Measure of Sampling Adequacy and Barlett's Test of Sphericity are presented in which the KMO score of 0.917 depicts that the sample size is sufficient enough for factor analysis as it was beyond the satisfactory standard score of 0.60 estimation threshold. At the same time, Bartlett's Test of Sphericity shows the acceptance of the assumption, which presents the test esteem of 6502.795 with the level of degree of freedom (df) value of 1431 and level of essentialness value of 0.000, depicting that the data set is appropriate and suitable for factor investigation as it is less than 0.05 level of significance that help to determine the salient and underlying factors that influence the individual taxpayers' adoption of BIR e-payment channels.

Table 1: Measures of Sampling Adequacy and Sphericity

Measurement		Value
Kaiser_Meyer_Olkin Measure of Sampling Adequacy		0.947
Barlett's Test of Sphericity	Approx. x^2	6502.795
	Degree of Freedom	1431
	Sig. (p-value)	0.000

Source: Data Processed Result, 2023

In Table 2, the rotated component matrix results are shown. The Varimax Orthogonal rotation method identified six factors with scale item loading with significant coefficient values above ±0.50. Fifty (50) out of sixty (60) scale items were retained and further formulated six latent components. Conversely, the ten items, specifically item numbers 58, 60, 37, 59, 57, 56, 32, 24, 33, and 55, did not pass the loading coefficient value threshold of ±0.50; as such, these items were eliminated for the factor analysis. Upon evaluating the commonality of these remaining scale items, such items were loaded and generated factors; then, the factors were further labeled based on the dominant nature of the scale items.

Table 2: Rotated Component Matrix

Items	**Component**					
	Perceived Usefulness	Perceived Benefit	Perceived Trust	Social Influence	Facilitation & Conditions	Perceived Cost
	(1)	(2)	(3)	(4)	(5)	(6)
Item_7	0.848					
Item_10	0.806					
Item_9	0.804					
Item_8	0.782					
Item_2	0.718					
Item_4	0.713					
Item_1	0.705					
Item_11	0.704					
Item_5	0.683					

Item_3	0.663				
Item_6	0.645				
Item_12	0.619				
Item_51		0.758			
Item_48		0.750			
Item_52		0.722			
Item_54		0.705			
Item_53		0.686			
Item_49		0.674			
Item_47		0.641			
Item_43		0.638			
Item_44		0.618			
Item_45		0.605			
Item_46		0.592			
Item_50		0.577			
Item_42		0.549			
Item_30			0.712		
Item_31			0.676		
Item_29			0.661		
Item_27			0.627		
Item_28			0.612		
Item_26			0.590		
Item_25			0.529		
Item_23			0.521		
Item_16				0.785	
Item_15				0.781	
Item_17				0.780	
Item_14				0.693	
Item_18				0.558	
Item_13				0.547	
Item_20					0.594
Item_36					0.579
Item_19					0.576
Item_34					0.542
Item_35					0.528
Item_21					0.512
Item_22					0.506
Item_40					0.833
Item_41					0.772
Item_39					0.688
Item_38					0.608

Source: Data Processed Result, 2023

Table 3: Extracted Factors Influencing the Adoption of e-Payment Channels Among Individual Taxpayers

ITEM	PERCEIVED USEFULNESS (12 items)	Loading
	I use e-payment channels (Gcash, Paymaya, Pesonet, Union Bank, etc.) because	
Q7	There should be some authority to approach in the case of failed online tax return reporting transactions.	0.848
Q10	I like those tax payments done through e-payment channels require minimum effort.	0.806
Q9	Legal disputes about online tax returns should be resolved in a timely manner.	0.804
Q8	There should be transparency in settling claims for failed online tax reporting transactions.	0.782
Q2	I believe e-payment channels would be useful for conducting tax payment transactions.	0.718
Q4	Using e-payment channels would make it easier for me to make tax payments.	0.713
Q1	Using it would enable me to pay income taxes more quickly.	0.705
Q11	Paying income taxes through e-payment channels is easy as minimum steps are required.	0.704
Q5	I believe e-payment channels improve the quality of tax payment transactions.	0.683
Q3	Using e-payment channels would improve my efficiency in tax payment transactions.	0.663
Q6	Using e-payment channels would improve my performance.	0.645
Q12	E-payment channels are very easy to use.	0.619
ITEM	PERCEIVED BENEFITS (13 items)	Loading
	I used the e-payment channels (Gcash, Paymaya, Pesonet, etc.) because	
Q51	I think e-payment channels are more convenient than manual tax payment (paying manually in banks)	0.758
Q48	I am happy to try new technology.	0.750
Q52	E-payment channels are faster than manual tax payments (paying manually in banks).	0.722
Q54	E-payment channels are more effective in managing tax payments than manual payments.	0.705
Q53	E-payment channels are more advantageous than manual tax payments (paying manually in banks).	0.686
Q49	Even if I am curious to know if anyone else has had this experience, I still use the e-payment channels to pay.	0.674
Q47	Among people of the same age, I am usually the first to try new technology (using e-payment channels).	0.641
Q43	E-payment channels are fast and worth using.	0.638
Q44	E-payment channels are very entertaining.	0.618
Q45	E-payment channels are a special experience.	0.605
Q46	I feel happy when I use e-payment channels to pay.	0.592
Q50	I know more about e-payment channels than my friends.	0.577

Q42	Using e-payment channels is fun.	0.549
ITEM	PERCEIVED TRUST (8 Items)	Loading
	I use e-payment channels (Gcash, Paymaya, Pesonet, etc.) because	
Q30	I trust income tax payments made through e-payment channels will be processed securely.	0.758
Q31	My personal information on e-payment channels will be kept confidential.	0.750
Q29	Tax payment transaction conducted through e-payment channels is secure and private.	0.722
Q27	The e-payment channels can be safer than traditional manual payment, such as paying manually in banks.	0.705
Q28	The technology used in e-payment is very secure.	0.686
Q26	I will be confident making income tax payments through e-payment channels.	0.674
Q25	Using e-payment channels is completely compatible with my current situation.	0.641
Q23	Using e-payment channels fits into my lifestyle.	0.638
ITEM	SOCIAL INFLUENCE (6 Items)	Loading
	I used the e-payment channels (Gcash, Paymaya, Pesonet, etc.) because	
Q16	Almost all my friends usee-pay ment channels.	0.758
Q15	people in my community widely use e-payment channels.	0.750
Q17	My family members use e-payment channels.	0.722
Q14	People who are important to me think that I should use e-payment channels	0.705
Q18	I am given the necessary support and assistance to use e-payment channels.	0.686
Q13	People who influence my behavior think I should use e-payment channels.	0.674
ITEM	FACILITATING CONDITIONS (7 Items)	Loading
	I used the e-payment channels (Gcash, Paymaya, Pesonet, etc.) because	
Q20	I can access the devices and mobile payment applications required to use e-payment channels.	0.5944
Q36	Compared with traditional manual payment, e-payment channels provide a good economic value in terms of current market prices.	0.579
Q19	I have the financial and technological resources required to use e-payment channels.	0.576
Q34	I believe that e-payment channel service providers follow consumer and tax laws.	0.542
Q35	Compared with traditional manual payment, the transaction cost paid using e-payment channels is reasonable.	0.528
Q21	My e-payment channels are well-integrated and provide a stable service infrastructure.	0.512
Q22	My service provider/operator facilitates the use of e-payment channels.	0.506
ITEM	PERCEIVED COST (4 Items)	Loading
	I used the e-payment channels (Gcash, Paymaya, Pesonet, etc.) because	
Q40	I would have to make a lot of effort to obtain the information that would make me comfortable adopting mobile payment.	0.833

Q41	It takes time to go through the process of moving ta a new means of payment like the e-payment channels.	0.772
Q39	I would have financial barriers to using the e-payment channels.	0.688
Q38	The e-payment channels would be very expensive.	0.608

Source: Data Processed Result, 2023

Perceived Usefulness. The individual taxpayers found perceived usefulness as a factor influencing the adoption of Philippines e-payment channels in paying income taxes. In particular, individual taxpayers agreed and believed that they should be able to approach a specific authority for instances of failed online tax payment transactions (.848), that tax payments through e-payment channels are made with minimum effort (.806), that legal proceedings or lawsuits relating to online tax payment should be resolved in a timely manner (.804); that transparency is evident in settlement of claims for online tax payment failed transactions (.782); and that e-payment channels would help conduct tax payment transactions (.718).

Furthermore, using e-payment channels would make it easier for individual taxpayers to make tax payments (.713), would enable them to accomplish paying income taxes more quickly (.705); that it is easy to pay income taxes through e-payment channels as minimum steps required (.704); that it improves the quality of tax payment transactions (.683); that it would improve their efficiency of tax payment transactions (.663); that it would improve their performance (.645); and that e-payment channels are straightforward to use (.619). This affirms the study of Davis (1985), which identified five indicators that assess perceived usefulness: work more quickly, practical, increase productivity, increase effectiveness, and enhance task performance. A study on e-Filing system implementation regarding compliance with tax reporting concluded a positive influence connecting perceived usefulness and intention to use electronic filing (Rekayana, 2016). Conversely, a study by Tahar et al. (2020) indicated that perceived usefulness does not significantly affect the adoption and intention to use electronic filing.

Perceived Benefit. In adopting e-payment channels for paying income taxes, perceived benefit is one of the factors influencing individual taxpayers. They agree that e-payment channels are more convenient than manual tax payment (.758); that they are happy to try new technology (.750); that it is faster than manual tax payment (.722); that it is more effective in managing tax payment than manual payment (.705); that it is more advantageous than manual tax payment (.686); and that even if they do not know if anyone else had experienced it before, they will still use the e-payment channels to pay their income taxes (.674). Additionally, the individual taxpayers agree that in the adoption of e-payment channels, they are usually the first to try new technology among people of the same age (.641), that e-payment channels are fast and worth using (.638), that it is very entertaining (.618); that it is an as exceptional experience (.605); that they feel happy when they use to pay their taxes (.592); that they feel that they know more about e-payment channels than their friends (.577); and that it is fun (.549). Ligon et al. (2019) revealed that perceived benefits play a significant role in adopting a system. Their study explored digital payment adoption and found that perceived benefits positively influence customers' intention to pay tax digitally. The same

result is found in (Al-Debei et al., 2015) study regarding consumers' attitudes toward online transactions. They emphasized the importance of perceived benefits as a critical factor in forming consumers' attitudes.

Perceived Trust. This variable is another factor in adopting e-payment channels to pay income taxes among individual taxpayers. Respondents have claimed that in using e-payment channels for income tax payments, they trust that it will be processed securely (.712); they believe that their personal information will be kept confidential (.676); they trust that the transaction is secure and private (.661); it has the potential to be safer than traditional manual payment (.627); they believe that technology used for such payments are very secure (.612); they are confident making such payment (.590); it is entirely compatible with their current situation (.529); and it fits into their lifestyle (.521).

A study by (Night & Bananuka, 2019) concluded that trust directly and positively affects taxpayers' attitudes toward adopting online systems. The study further stated that the taxpayers perceive the electronic tax system as secure, making them trust and adopt it. In another study, trust as a factor significantly influences the intention and attitude of a user in new technology adoption, thus making a binding effect (Alswaigh & Aloud, 2021). It proposed that trust positively and significantly affects the user attitude towards adopting a digital payment system called money wallet services.

Social Influence. In the adoption of e-payment channels in paying income taxes, individual taxpayers consider social influence as a factor because they claimed that almost all of their friends use it (.785); such e-payment channels are widely used by people in their community (.781); their family members use it (.780); important people in their lives urge them to use the e-payment channels (.693); they are given the necessary report and assistance to use it (.558); and people who have an impact on their behavior urge them to use the e-payment channels (.547). A study conducted by (Abdul Aziz, 2016) reveals how acceptability affects the non-compliance behavior among tax agents in adopting the corporate tax electronic filing system through factors such as social influence. It concludes a positive and significant effect connecting social influence and the taxpayers' intention to use the e-filing system for tax return reporting and payment. However, a study on the intention to use and adopt mobile banking by (S. Singh & Srivastava, 2018) concluded that social influence does not affect the customer's intention. It revealed no significant connection between social influence and intention to use electronic banking.

Facilitating Conditions. The individual taxpayers found facilitating conditions to influence the adoption of e-payment channels in paying income taxes. Correspondingly, these taxpayers, in using the e-payment channels, believe that: they have access to the devices and mobile payment applications required (.594); that it provides economic value in terms of current market prices compared with the traditional manual payment (.579); that they have financial and technological resources required in using it (.576); that its service provider follow consumer and tax laws (.542); that the transaction costs paid are reasonable compared with the traditional manual payment (.528);

that it is well integrated and provide a stable service infrastructure (.512); and that their service provider or operator facilitates its use (.506). Research on behavioral expectations toward electronic tax filing adoption concluded that facilitating conditions positively and significantly affected taxpayers' intentions (Chaouali et al., 2016). It further demonstrated that it integrates as a key factor in providing knowledge that may foster the adoption process of electronic filing. Similarly, the same result is found in the study of (Moorthy et al., 2022) on mobile payment adoption, revealing a significant relationship with facilitating conditions. It implies an improvement in service providers' quality through enhancing facilitating conditions.

Perceived Cost. Individual taxpayers have taken perceived cost as a factor influencing their payment of income taxes through adopting e-payment channels. Adopting the e-payment channels requires much effort in gathering the necessary data to use it comfortably (.833); it may take a while to transfer to a new means of payment like the e-payment channels (.772). Moreover, the results also showed negative perceptions that the respondents considered the relative cost; they believe using the e-payment channels would have financial barriers (.688) and be costly (.608). A study conducted by (Azam et al., 2021) reveals that perceived cost is one factor affecting the adoption of electronic commerce in the country. In contrast, a negative relationship is found between perceived cost, mobile payment adoption, and intention to use (Sena Abrahão et al., 2016). Perceived cost as a construct was found insignificant regarding payment transactions in mobile phones that possess flexible and convenient processing.

Table 4 presents the percentage of variances of the extracted factors, further explaining the general variations of the analyzed data. Specifically, the first component, perceived usefulness, illustrates 52.956 percent of the factor structure that signifies the highest factor influencing the adoption of the e-payment channels, gaining the highest initial eigenvalue of 28.596 with 12 retained items. The second component, the perceived benefit, explained 7.085 percent of the structure of the data and garnered the second-highest initial eigenvalue of 3.826 with six loaded items. The third component, perceived trust, explains 4.667 percent of the data variations with an initial eigenvalue of 2.520 and 8 cross-loaded items. The fourth component, social influence, has an initial eigenvalue of 1.792 and 3.318 percent of the variance, having six items retained.

Table 4: Latent Roots Criterion Results of the Extracted Factors

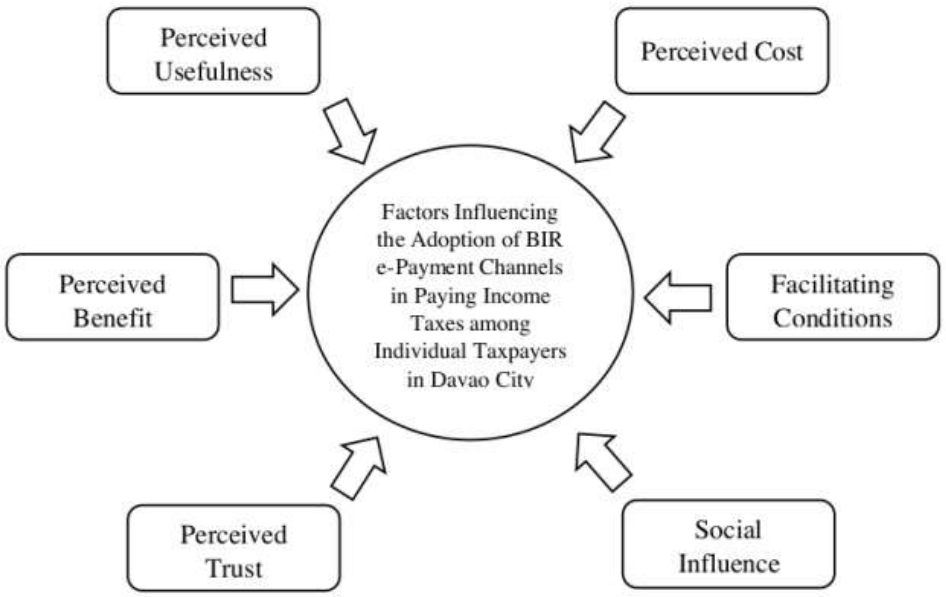
Factors	Initial Eigenvalue	% of Variance	Cumulative Variance
Perceived Usefulness	28.596	52.956	52.956
Perceived Benefit	3.826	7.085	60.041
Perceived Trust	2.520	4.667	64.708
Social Influence	1.792	3.318	68.026
Facilitating Conditions	1.384	2.563	70.589
Perceived Cost	1.314	2.434	73.023

Source: Data Processed Result, 2023

Subsequently, the fifth factor is labeled as facilitating conditions with an initial eigenvalue of 1.384 and 2.563 percent of the total data variance with seven items. The last factor, the perceived cost, has an initial eigenvalue of 1.314 and 2.434 percent of the total variance. Overall, the 60-item pilot-tested scale comprising statements that signify components influencing the adoption of e-payment channels was diminished to a six-factor scale with 50-retained item statements. These retained items illustrate a cumulative 73.023 percent of the factor analysis structure that determines the underlying factors influencing the adoption of BIR e-Payment channels among the research respondents. Meanwhile, the 26.977 percent of the remaining variance can be explained by other factors viewed beyond and not accounted for in this study's results.

Shown in Figure 2 is the formulated thematic framework based on the results of this study. As such, it was identified that there are six latent factors influencing the adoption of Philippines e-payment channels in paying income taxes among individual taxpayers. Results showed that 50 items were retained after the cross-loadings, which further identified six significant components in this research undertaking. These components are namely: perceived usefulness, perceived benefit, perceived trust, social influence, facilitating conditions, and perceived cost. The developed framework illustrates what factors induce individual taxpayers to adopt the suggested electronic payment system in paying their income taxes.

Figure 2. Thematic Framework of the Study



CONCLUSION

The factors influencing the adoption of e-payment channels in paying income taxes among individual taxpayers are perceived usefulness, perceived benefit, perceived trust, social influence, facilitating conditions, and perceived cost. The developed research framework of this study shows perceived usefulness, perceived benefit, perceived trust, social influence, facilitating conditions,

and perceived cost as the identified constructs that illustrate the relevance and structure of factors influencing the adoption of e-payment channels in paying income taxes among individual taxpayers. Furthermore, the assumption of the adoption of e-payment channels in paying income taxes among individual taxpayers, specifically the single proprietors, mixed-income earners, and professionals, is multifaceted that is based on the perception of the relative technology system users and is a function of factors of perceived usefulness, perceived benefit, perceived trust, social influence, facilitating conditions, and perceived cost.

The researchers extracted six factors influencing the adoption of e-payment channels in paying income taxes. The purpose of identifying these factors is to determine those considerations in mind by the Philippines' Bureau of Internal Revenue (BIR) e-payment channel adopters using such a payment mode to pay their income taxes. It addresses the electronic taxpayers' attitude toward using the electronic system. Using the digitized system increases the percentage of revenue collection that helps the country recover from the COVID-19 pandemic that paralyzed the flow of our economy. When situations that may shut down transactions done physically might re-occur, the blood life of the government will continue to operate and serve its purpose for the welfare of its citizens. As such, one of the sheer forces of exploring this study is to enable the non-adopters of the e-tax payment system to consider using such a mode of payment in paying their income taxes and know the factors that influence the adoption of the e-payment channels. It helps to encourage the non-adopters to embrace the continuous development and revolution of centralizing the e-tax payment system for efficient and boosting tax revenue collection of the country.

The study further added empirical knowledge regarding the salient factors influencing the adoption, and it found out that aside from the perceived usefulness, social influence, and facilitating conditions coming from the theories used by this study, it revealed that perceived benefit, perceived trust, and perceived cost were considered as primary factors. This study concluded that the respondents also have negative perceptions of the relative cost of using such a mode of payment, considering its transaction price and financial barriers. These were based on the study results on commonality and dominance among the scale items retained after the factor loadings and analysis.

Moreover, the study agrees with the Technology Acceptance Model (TAM) theory, in which perceived usefulness was identified as one of the primary factors to consider in technology acceptance and adoption. It also agrees with another theory on which this study was grounded, the Unified Theory of Acceptance and Use of Technology (UTAUT), which identified social influence and facilitating conditions as salient factors influencing an individual's behavior regarding the adoption and relative use of certain technological advancements. As such, this implies that perceived usefulness, social influence, and facilitating conditions can induce an individual taxpayer's ability to adopt the e-payment channels in paying their income taxes.

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