THE BUSINESS STRATEGY OF THE UTILITY TOKEN ADOPTION BY **INVESTORS IN A DEVELOPING** COUNTRY

Veraphong Chutipat^{*}, Rattaphong Sonsuphap^{**}, Ruangchan Thetlek

* Corresponding author, College of Social Innovation, Rangsit University, Pathum Thani, Thailand

Contact details: College of Social Innovation, Rangsit University, 52/347 Phahon Yothin Road, Muang Eke, Pathum Thani 12000, Thailand

** College of Social Innovation, Rangsit University, Pathum Thani, Thailand

*** Faculty of Economics, Rangsit University, Pathum Thani, Thailand



How to cite this paper: Chutipat, V., Sonsuphap, R., & Thetlek, R. (2023). The business strategy of the utility token adoption by investors in a developing country. Corporate & Business Strategy Review, 4(3), 139-147. https://doi.org/10.22495/cbsrv4i3art14

Copyright © 2023 The Authors

This work is licensed under a Creative **Commons Attribution 4.0 International** License (CC BY 4.0). https://creativecommons.org/licenses/by /4.0/

ISSN Online: 2708-4965 ISSN Print: 2708-9924

Received: 31.01.2023 Accepted: 16.08.2023

JEL Classification: D71, G41, O33 DOI: 10.22495/cbsrv4i3art14

Abstract

Utility tokens, which are cryptocurrencies on a smart contract blockchain that serve a specific purpose within the ecosystem of a crypto project (Shirole et al., 2020), have exploded in popularity among Thai investors over the past few years due to the fact that their value tends to increase much more rapidly than that of traditional assets. This study attempts to analyse the variables influencing Thai investors' adoption of utility tokens. A binary logistic regression was conducted to find factors of statistical significance. The results indicate that gender, level of education, income, savings, the types of financial instruments an investor owns, and the investor's use of social media platforms are significant determinants of utility token adoption. The article argues that when planning marketing efforts, organisations issuing utility tokens should consider their clients' gender, level of education, income, and savings, as these factors have a substantial influence on utility token adoption. In addition, in order to increase the adoption of utility tokens by experienced investors, brokers or financial advisors must evaluate the customer's current financial holdings in order to develop successful financial plans and provide appropriate guidance to customers.

Keywords: Utility Token, Digital Token, Cryptocurrency, Digital Asset Investment, Financial Instrument

Authors' individual contribution: Conceptualization — V.C., R.S., and R.T.; Methodology – V.C.; Validation – V.C., R.S., and R.T.; Formal Analysis – V.C., and R.S.; Investigation – V.C., R.S., and R.T.; Resources - V.C., R.S., and R.T.; Data Curation - V.C. and R.S.; Writing — Original Draft — V.C., R.S., and R.T.; Writing — Review & Editing - V.C., R.S., and R.T.

Declaration of conflicting interests: The Authors declare that there is no conflict of interest.

1. INTRODUCTION

In the rapidly evolving digital age, technological advancements are revolutionising various aspects of life, providing convenience and transforming traditional practices (Jain et al., 2023; Limna et al., 2023). Among these cutting-edge innovations, blockchain technology stands out, offering immense potential and promising prospects for the future. The disruptive power of blockchain is being felt across numerous vertical sectors, as it introduces possibilities and transforms traditional new processes (Sarmah, 2018; Warner & Wäger, 2019). New business models may be developed using blockchain technology in a variety of ways (Marikyan et al., 2022). Since the development of the Internet, blockchain technology is credited with bringing forth important advances like decentralisation and

VIRTUS 139

trustless networks. One of the key elements among many that have helped blockchain technology succeed is the use of digital tokens and coins (Sharma, 2022). Indeed, there are many distinct types of such digital assets. Although all digital assets are frequently referred to as "cryptocurrencies", there are in fact a number of distinct types of digital currencies (Härdle et al., 2020). Coins and tokens are the two basic categories into which the majority of them fall. The only purpose of coins, or currencies, is to transfer financial value. Good examples of currencies include bitcoin (BTC) and litecoin (LTC). On the other hand, tokens belong to an altogether separate class of cryptocurrencies. The most typical forms of tokens are security tokens and utility tokens (Rodríguez Ramos, 2018; Tardi, 2022).

A utility token is a cryptocurrency on a smart contract blockchain that has a specified purpose inside the ecosystem of a crypto project (Shirole et al., 2020). Currently, utility tokens are the most popular form of token due to the enormous number of blockchain enterprises that debut each year. Initial coin offerings (ICOs) allow startups to raise capital by creating tokens that can be sold to the general public in exchange for cryptocurrencies or other digital assets (Zipmex, 2021). This enables a company to promote interest in their products and services in blockchain ecosystems. The tokens may be redeemed for a specific service or receive preferential treatment when purchasing services on a platform (Tönnissen et al., 2020). Any utility token may be stated to be the same way. Utility tokens are often not mineable cryptocurrencies like bitcoin (BTC) or litecoin (LTC). As a means of generating interest in the product or service, they are often pre-mined, generated all at once, and dispersed to investors during the initial coin offering (ICO) phase (Grobys & Sapkota, 2020). Although investors may be able to acquire and use utility tokens as a form of payment on the network to redeem or obtain access to a certain service, utility tokens have no monetary worth. They are not designed to be used as a medium of exchange in the real world, unlike cryptocurrencies such as bitcoin (Benedetti et al., 2023). In addition, utility tokens are not designed for investment, unlike security tokens. Security tokens consist of corporate ownership rights, similar to decentralised digital shares used for investing. In contrast, utility tokens do not give investors a genuine piece of a company's financial ownership. As a result, these tokens are not meant to be used as typical securities (Lambert et al., 2022).

In Thailand, there are several utility tokens launched by Thai FinTech companies, and investors and the general public are interested in them. BNK Governance Token from Token X, for instance, is used in fan voting activities for BNK48. a famous Thai-pop girl group, and can be exchanged for company-specified items and services on the iAM48 application (BNK48, 2022). FIIT Token issued by Digital, a FinTech company under SABUY Kasikornbank (KBank), is a token for the Health and Wellness Community based on the "fit to earn" idea, which is the ability to exercise and earn coins through games and challenges in the app, as well as collect non-fungible tokens (NFTs) (SABUY Tech, 2022). The Securities and Exchange Commission (SEC) classifies digital tokens as either investment tokens or utility tokens, with utility tokens further subdivided into ready-to-use utility tokens and notready-to-use utility tokens (SEC, n.d.). Ready-to-use utility tokens are digital tokens with an associated permission that allows them to be promptly redeemed for goods or services, or to benefit buyers from the date of the initial sale. Not-ready-to-use utility tokens are digital tokens with the underlying right to obtain certain products or services that cannot be used immediately but later (Manasan, 2022). Currently, the SEC has only overseen the issuance of not-ready-to-use utility tokens. Ready-to-use utility tokens are gaining popularity as market the digital asset expands without governmental oversight, and many are now available for trading on digital asset markets. The SEC stated on May 30, 2022, that it will begin controlling readyto-use utility tokens that were previously exempt from SEC approval and federal oversight as some issuers seemed to be leveraging a legal gap to influence the price and supply of ready-to-use utility tokens on both the primary and secondary markets while giving inadequate data disclosure to investors (Thienpreecha et al., 2022). If the SEC approves these tighter standards for ready-to-use utility tokens, many investors and fintech businesses may experience both positive and negative consequences. However, these regulations will improve governance in line with the nature, risks, developments, and uses of tokens, and they will establish a more transparent and efficient trading supervisory system, as well as a proper method to safeguard traders or investors.

The popularity of utility tokens as digital assets has grown significantly worldwide, including in Thailand, particularly among younger generations who perceive them as a lucrative investment option with the potential for substantial returns in a short period. This trend is evident from the increasing number of companies issuing utility tokens. Given this context, it is crucial to explore the likelihood of Thai investors adopting utility tokens. However, despite the rising interest in utility tokens and their diverse applications across industries, there is notable dearth of а comprehensive research specifically focusing on the factors that influence Thai investors' adoption of utility tokens. While several studies have examined utility tokens on global scale, the distinct factors shaping а the acceptance and usage of utility tokens within the Thai investment community remain relatively unexplored. Consequently, this study seeks to bridge this research gap by thoroughly investigating the factors that impact the adoption of utility tokens by Thai investors. To identify statistically significant variables, a binary logistic regression was used. The results demonstrate that key influences on the adoption of utility tokens include: 1) gender, 2) level of education. 3) income. 4) savings. 5) the sorts of financial instruments an investor holds, and 6) the social media platforms that an investor frequently uses. Companies selling utility tokens in Thailand may find these research findings beneficial for gaining a better understanding of their clients and developing more effective marketing strategies to attract additional users. In addition, Thailand's governmental sector, such as the SEC, may employ these results to develop policies that encourage investors in digital assets; as a result, Thailand's digital economy will expand considerably and sustainably.

VIRTUS 140

The remain of the study has the following structure. Section 2 is a literature review. Section 3, explains the research method. Section 4 presents the results of the study, and Section 5 provides a discussion of these results. Section 6 contains the study's findings, limitations, implications, and recommendations for further research.

2. LITERATURE REVIEW

The literature on the business strategy of utility token adoption offers valuable insights into the considerations and approaches that organisations can employ to integrate utility tokens successfully into their operations. Multiple studies have emphasised the importance of aligning the design functionality of utility tokens and with an organisation's overall business objectives. For instance, Prat et al. (2021) presented a comprehensive framework for assessing the fundamental price of utility tokens. Their model incorporates the endogenous velocity of token circulation and establishes a pricing formula that is fully grounded in microeconomic principles. The authors argue that utility tokens possess inherent value due to their immediate accessibility when the platform service is required, akin to the cash-in-advance constraint in the theory of money. This approach sheds light on the underlying factors that contribute to the valuation of utility tokens, emphasising their essential role in facilitating seamless transactions within the platform ecosystem.

Regarding this study's objectives, the literature review focused on factors influencing utility token adoption. However, it is important to note that there is limited research specifically on the acceptability of utility tokens. Therefore, studies on the acceptance of other digital assets were explored as a proxy for understanding the factors that may affect utility token adoption.

2.1. Demographic factors affecting the adoption of digital assets

The term "demography" derives from the Greek words "demos", which means "people", and "graphy", which means "to draw or write". Thus, demographics are defined as population-related words or visuals (Widodo & Umar, 2021). It is the scientific study of the symptoms and direction of a population's development within its social context (Prihatini & Widakdo, 2022). This study's population analysis can encompass the entire community or be segmented according to specified characteristics, such as: 1) gender, 2) educational level, 3) occupation, 4) income, and 5) savings since a number of studies have indicated that these factors affect the adoption of digital assets and new technology.

The most popular digital assets are cryptocurrencies; hence, there have been a number studies related the adoption of of to cryptocurrencies. This may be applicable to this research as utility tokens are a kind of cryptocurrency. Numerous studies have demonstrated that demographic characteristics are connected with digital currency acceptance. One of the most relevant studies is Seong et al. (2021), which analyses the impact of demographic characteristics of consumers, including: 1) gender, 2) race, 3) age, 4) education, and 5) income, on millennials' behaviour and intention to embrace cryptocurrencies in Malaysia, using the unified theory of acceptance and use of technology (UTAUT) model. For the data analysis procedure, a total of 304 responses were gathered. This study included non-probabilistic sampling strategies, including snowball and purposive sampling. Using the binomial logit qualitative response regression econometric model, the data were analysed. The findings indicate that the gender, age, education, and income of millennials affect their intention to adopt crypto, but not their race. Singh et al. (2020) investigated FinTech uptake and use from the perspective of technology acceptance by including the sub-constructs technology acceptance model (TAM), UTAUT, ServPerf, and WebQual 4.0. The data were gathered from 439 regular users of the Internet using an online questionnaire, which was then analysed using structural equation modelling and multigroup analysis. The data indicate that age greatly influences older users' perceptions of security, which influences fintech adoption by this age group.

2.2. Types of financial instrument affecting the adoption of digital assets

"Traditional" financial assets consist of: 1) equity shares, 2) debt securities, 3) foreign exchange, and 4) derivatives. These assets constitute an entity's obligation. Equity instruments, for instance, may oblige a corporation to deliver earnings or liquidation proceeds to its shareholders (Parameswaran, 2022). In recent years, the financial markets have witnessed the emergence of newer forms of assets that also include an entity's responsibility. A recent expansion "non-traditional" financial assets, such as of cryptocurrencies and stablecoins, is questioning the validity of these pragmatic definitions of financial assets. By analysing the technology and functionality underlying non-traditional financial assets, the legal literature has sought to classify innovative assets within the current framework for defining financial assets (Callens, 2021).

The types of financial instruments held by an investor may be correlated with their level of digital trading expertise. Although the investing for traditional and non-traditional assets are identical, non-traditional principles for financial financial assets are associated with more advanced technologies such as blockchain technology (Callens, 2021). In addition, digital financial assets are intangible since they exist in digital form; hence, they may lack regulatory clarity, exhibit significant volatility, and be subject to restricted study and appraisal. This causes investors to have less trust (KPMG, 2022). Therefore, those who possess digital assets are more likely to assess their usefulness and ease of use than those who do not. In construction, perceived ease of use refers to how much the user anticipates and believes that using this service or technological system will be simple (Albayati et al., 2020). Perceived usefulness is the degree to which a person feels that the use of a technology or system might be beneficial to them and could enhance their performance (Chathurika, 2020). This idea is consistent with TAM, a comprehensive model that predicts consumers' intentions to use new technologies (Harb & Alhayajneh, 2019). In light of the fact that financial instrument types embody the idea of TAM, this study sought to determine if financial instrument types had an effect on utility token adoption.

2.3. Media channels in accessing information affecting the adoption of digital assets

Individual, group, and organisational decisionmaking is influenced by several elements, including information technology and decision support systems. Information technology has become more networked and more powerful during the past halfcentury (Power & Phillips-Wren, 2011). Recent developments in user interfaces for social tools and an increase in the use of mobile wireless computers have developed instantaneous, widely distributed, mostly unmanaged, and ubiquitous social networks. Information technology development continues to generate new opportunities (Mim & Ahmed, 2020). The social media revolution has resulted in new ways to seek and acquire information about the huge assortment of products and services on the market. It has enabled instantaneous customer interaction and brand discussion (Powers et al., 2012). Consumer sentiments toward products and services are increasingly influenced by digital acquaintances, which influence offline judgements (Smith, 2009).

Various studies have revealed the impacts of online media on decision-making. The survey conducted by DiStaso and Mccorkindale (2017) investigated the extent to which social media affects four industries: 1) healthcare, 2) finance, 3) travel (personal, not commercial), and 4) retail. The data was obtained from 1,783 Internet users. While there were disparities in the extent of influence across industries, social media was rated significant in decision-making and advice-seeking. Across all generations, 40% of the respondents indicated that social media influenced their travel-related decisionmaking. Social media are also prominent, albeit to a lower extent, in other areas, with 25% of respondents identifying its influence in financial services, 22% in retail, and 21% in healthcare. In addition, the data reveal that consumers typically seek guidance on social media. More than one-third of the respondents (38%) indicated they were inclined to search social media for travel tips. Nearly one-fifth (21%) indicated they were likely to seek help when making decisions on financial services, healthcare (25%), and retail purchases (18%) (DiStaso & Mccorkindale, 2017, p. 3). Voramontri and Klieb (2019) investigate experimentally the influence of social media on the complicated buying decisionmaking process of customers. The data were collected from Internet-savvy customers in South-East Asia, and the study only analysed real purchases made by consumers, excluding abandoned searches. The model incorporates the information search, alternative appraisal, and purchase decision phases of the traditional evidencebased medicine (EBM) paradigm. A quantitative survey analyses the extent to which the use of social media modifies experiences. The results indicate that the use of social media affects customer happiness during the information search and alternative evaluation stages, with satisfaction increasing as the consumer goes through

the purchase decision and post-purchase assessment phases.

Since there are several indications that Internet media influence decision-making, this element was evaluated to determine whether it affects the adoption of utility tokens. In addition, mass media channels were examined, as they are the conventional means of disseminating news and information.

3. RESEARCH METHOD

This quantitative research was conducted among 1,280 Thai investors residing in Thailand who own financial instruments such as stocks, bonds, and mutual funds. As stated by Shaengchart and Kraiwanit (2023), convenience sampling is a nonprobability technique employed by researchers to collect data from a readily available and easily accessible pool of respondents. This approach involves selecting a sample from a population that is close at hand, easily accessible, or convenient. Hence, the samples were chosen using the approach convenient sampling, as recommended by of Kraiwanit (2021), Shaengchart et al. (2023) and Sitthipon et al. (2022). The primary rationale for selecting this group of investors is because they are likely to be familiar with utility tokens or have some understanding of digital tokens, allowing them to accept or reject the utility tokens based on their experiences or expertise. A Google Form-created online questionnaire was used to collect the data, which was then distributed via different Internet channels, including email, LINE, and Facebook, as recommended by Shaengchart et al. (2023). To analyse the collected data, the researchers utilised statistical analysis software to conduct descriptive and inferential analyses. Binary logistic regression was used to analyse the data. There were three categories of independent variables: 1) demographic factors (gender, level of education, occupation, income, and savings), 2) types of financial instruments that the respondent currently possessed, and 3) media that the respondent typically accessed (types of mass media and social media platforms). Gender and Occupation are dummy variables for demographic variables. Regarding gender, male is one (1) and female is zero (0). Regarding occupation, a businessperson has a value of one (1), whereas a non-businessperson has a value of zero (0). Utility token adoption is a dichotomous dependent variable assessed on a dichotomous scale: "yes" or "no". "Yes" indicates that the respondent accepts utility tokens and has already held such tokens or is likely to adopt them in the future, whereas "no" indicates that the respondent does not accept utility tokens and is unlikely to adopt them.

4. RESULTS

The binary logistic regression analysis in this study was performed for two models. The first model is the model using all independent variables (*Gender*, *Level of education*, *Occupation*, *Income*, *Saving*, *Financial instruments*, *Mass media*, and *Social media*), called Model 1; while the second model is the model using only the significant independent variables from Model 1, and so, called Model 2.

The overall test of Model 1 is shown in Table 1. It is an omnibus test of the model coefficients, which is used to test the model's fit. The results show that this model is showing a good fit as there is a significant improvement in fit as compared to the null model, $\chi^2(9) = 688.571$, p < 0.05.

 Table 1. Omnibus tests of Model 1 coefficients (including all independent variables)

Step 1	Chi-square	df	Sig.
Step	688.571	9	0.000
Block	688.571	9	0.000
Model	688.571	9	0.000

According to Table 2, the model summary of Model 1 shows the pseudo R-square values (Cox & Snell R-square and Nagelkerke's R-square). These Pseudo R-Squares are not technically explaining the variation; however, they can be used as an approximate variation in the criterion variable (Hasan, 2020). The Nagelkerke's R-square, an adjusted version of the Cox & Snell R-square, is commonly used for interpreting results. Therefore, the explained variation in the dependent variables based on Model 1 is 57.9%.

Table 2. The summary of Model 1(including all independent variables)

	Step 1	-2 Log-likelihood	Cox & Snell R-square	Nagelkerke's R-square				
-		935.775ª	0.416	0.579				
	Note: a. Estimation terminated at iteration number 6 becaus							
	paramete	er estimates change	d by less than 0.001	1.				

The classification table of Model 1 in Table 3 provides an indication of how well the model is able to predict the correct category once the predictors, which included all independent variables, are added

into the study. The results show that Model 1 correctly classified 74.1% of cases overall.

Table 3. Classification of Model 1

 (including all independent variables)

			Predicted			
Observed		Accepted utility tokens		Percentage correct		
		No	Yes	correct		
	Accepted utility	No	672	185	78.4	
Step 1	tokens Yes		147	276	65.2	
	Overall perce	entaae			74.1	

Note: The cut value is 0.500.

Table 4 presents the statistical significance for each of the independent variables in Model 1. According to the results, Gender (p = 0.024), Level of education (p = 0.004), Income (p = 0.000), Savings (p = 0.000), *Financial instruments* (p = 0.000), *Social media* (p = 0.000) added significantly to the model, while *Occupation* (p = 0.285) and *Mass media* (p = 0.480) did not add significantly to the model. The table is also used to predict the probability of an event occurring based on a one-unit change in an independent variable when all other independent variables are kept constant. The summary is as follows: Accepting utility tokens is 1.612 times greater for males as opposed to Increasing the level of education or females. financial instruments by one unit was associated with a reduction in the likelihood of accepting utility tokens while raising income, savings, or social media by one unit was associated with an increased likelihood of accepting utility tokens.

 Table 4. Variables in Model 1

 (including all independent variables)

Variables	В	S.E.	Wald	df	Sig.	Exp(B)
Score	-0.489	0.064	59.149	1	0.000	0.613
Gender	0.477	0.212	5.075	1	0.024	1.612
Level of education	-0.649	0.223	8.486	1	0.004	0.523
Occupation	-0.287	0.268	1.145	1	0.285	0.751
Income	0.763	0.106	51.342	1	0.000	2.145
Saving	0.630	0.124	25.756	1	0.000	1.878
Financial instruments	-1.769	0.149	141.824	1	0.000	0.170
Mass media	0.058	0.082	0.498	1	0.480	1.059
Social media	0.949	0.111	72.731	1	0.000	2.582
Constant	-0.269	0.630	0.182	1	0.670	0.764

According to Model 1, significant independent variables are *Gender*, *Level of education*, *Income*, *Savings*, types of *Financial instruments*, and *Social Media*. Hence, these variables were included in Model 2.

Table 5 presents the overall test of Model 2. The omnibus test of the model coefficients, which is used to test the model's fit, indicates that the overall model is statistically significant, $\chi^2(7) = 687.045$, p < 0.05, showing that Model 2 has a good fit.

 Table 5. Omnibus tests of Model 2 coefficients (including only significant variables)

Step 1	Chi-square	df	Sig.
Step	687.045	7	0.000
Block	687.045	7	0.000
Model	687.045	7	0.000

The model summary of Model 2 in Table 6 presents the values of the Cox & Snell R-square and Nagelkerke's R-square, which both calculate the explained variation. The Nagelkerke's R-square, a commonly used pseudo R-square, indicates that the model explained 57.8% of the variance in accepting utility tokens.

Table 6. The summary of Model 2(including only significant variables)

Step 1	-2 Log-likelihood	Cox & Snell R-square	Nagelkerke's R-square
	937.300ª	0.415	0.578

Note: a. Estimation terminated at iteration number 6 because parameter estimates changed by less than 0.001.

Table 7 shows the classification table of Model 2, which indicates how well the model is able to predict the correct category once the predictors

NTERPRESS VIRTUS

(only significant variables) are added into the study. The results show that Model 2 correctly classified 77.2% of cases overall.

Table 7. Classification of Model 2(including only significant variables)

Observed		Predicted			
		Accepted utility tokens		Percentage	
		No	Yes	correct	
	Accepted		692	165	80.7
Stop 1 utility	utility tokens	Yes	127	296	70.0
	Overall perce	ntage			77.2

Note: The cut value is 0.500.

Table 8 presents the statistical significance for each of the independent variables in Model 2.

The results indicate that *Score* (p = 0.000), *Gender* (p = 0.032), Level of education (p = 0.000), Occupation (p = 0.000), Income (p = 0.000), Saving (p = 0.000), Financial instruments (p = 0.000), and Social media (p = 0.000) added significantly to the model, while *Mass media* (p = 0.995) did not. The table also predicts the probability of an event occurring based on a one-unit change in an independent variable when all other independent variables are kept constant. The interpretation is as follows: Males were 1.548 times more likely to accept utility tokens than females. An increase by one unit of the level of education or financial instruments was associated with a decrease in the likelihood of accepting utility tokens, while a one-unit increase of income, savings, or social media was associated with an increased likelihood of accepting utility tokens.

Table 8. Variables in Model 2

 (including only significant variables)

Variables	В	S.E.	Wald	df	Sig.	Exp(B)
Score	-0.500	0.063	63.094	1	0.000	0.606
Gender	0.437	0.204	4.610	1	0.032	1.548
Level of education	-0.762	0.204	13.896	1	0.000	0.467
Occupation	0.705	0.090	61.356	1	0.000	2.023
Income	0.700	0.112	39.331	1	0.000	2.014
Saving	-1.850	0.135	188.535	1	0.000	0.157
Financial instruments	0.992	0.097	104.000	1	0.000	2.697
Mass media	-0.003	0.582	0.000	1	0.995	0.997
Social media	-0.500	0.063	63.094	1	0.000	0.606
Constant	0.437	0.204	4.610	1	0.032	1.548

Note: Model including only significant variables.

5. DISCUSSION

This study investigates the factors affecting the adoption of utility tokens. A binary logistic regression was performed to ascertain the effects of Gender, Level of education, Income, Saving, types of Financial instruments, and Social media platforms on the likelihood that investors accept utility tokens and tend to invest in them. while Occupation and Mass media have insignificant impacts on the adoption of utility tokens. Since Model 2, which includes only the significant variables, shows a higher correct classification (77.2% of cases overall), this model is used to discuss the research results. In this study, males are 1.548 times more likely than females to embrace utility tokens. There may be several explanations for this outcome. Gender or sex is an intrinsic trait that causes men and women to distinct physical and psychological have characteristics (Prihatini & Widakdo, 2022). One of the reasons why female investors are more hesitant than male investors to accept utility tokens is that women's decision-making reveals a greater sensitivity to risk than men's decision-making. According to several researchers (Eckel & Grossman, 2008; Shrestha et al., 2020), women are more riskaverse than males. Not only do risk tolerances vary consistently between men and women, but so do their perceptions of the possible advantages and amount of danger associated with taking risks. In the context of financial investment, a possible explanation for women's lower risk-taking is that they are less optimistic than men and, as a result, more likely to conclude that available risk premia are insufficient and therefore more likely to withdraw from risky assets when confronted with negative information (Brooks et al., 2019).

Education is one of the important aspects influencing the adoption of utility tokens. This component is a means for a person to acquire information that may be used in a variety of situations and make life easier. Learning is applied to finding an appropriate way to complete a task in a job setting (Prihatini & Widakdo, 2022). According to (Lin, 2011), behaviour and perspective are influenced by a person's educational background. The greater one's knowledge, the more intelligently one carries out one's duties. Therefore, an individual with a high degree of education has more selfefficacy. In other words, the greater the formal education, the greater the opportunity to study and acquire superior job-related information. This might be relevant for investing. The length of a trader's experience might define his or her level of expertise. According to this study's findings, the likelihood of accepting utility tokens decreases as formal education increases. It may be expected that when individuals perceive more information and have a better understanding of utility tokens, they prefer to reject their adoption.

Income affects the adoption of utility tokens significantly, in the positive direction. This indicates that investors with higher incomes are more likely to accept utility tokens than those with lower incomes. This may be because higher-income individuals are more ready to take financial risks than those with lower incomes. This study is consistent with Xi et al. (2020), which indicates that income is a crucial factor of cryptocurrency investment among Australians, with those who have previously participated in the market having weekly salaries ranging from 1,000 and 2,500 Australian dollar (AUD). Those grow more risk tolerant as their income increases, and the findings are consistent with



the nature of cryptocurrencies, which allows people who have never invested beyond their retirement funds to participate in something that provides them the opportunity to become "wealthy".

Savings shows a statistically significant and positive effect on the adoption of utility tokens. This indicates that investors with larger savings are more inclined to accept utility tokens. The amount of savings may represent the investors' financial knowledge. Higher levels of financial literacy, according to Stolper and Walter (2017), are connected with more saving planning, more saving behaviour, greater stock market involvement, and better decisions regarding the selection of financial goods. In contrast, inadequate financial literacy is related with inferior financial decisions, more expensive loans, expensive credit card behaviour, and excessive debt accumulation. Multiple studies indicate that financial knowledge is a predictor of financial behaviour. Lusardi and Mitchell (2014) conclude from a review of the relevant research that the stronger a person's financial knowledge, the more likely he or she is to participate in financial markets and invest in stocks. Hastings et al. (2013) show in their literature review that financial knowledge influences behaviour about the usage of credit cards, investments, mortgage loans, and retirement savings programmes. Several prior studies suggest that individuals with higher savings are more financially literate and, as a result, more ready to invest in stocks. Consequently, this assumption may apply to the adoption of utility tokens, and it can be anticipated that investors with higher savings are more likely to embrace utility tokens since they are likely to have a greater comprehension of finance.

The types of financial instruments that a respondent currently possesses are significant for the adoption of utility tokens. There may be a correlation between the sorts of financial instruments and their level of digital trading competence. Although the investment fundamentals for conventional and non-conventional financial assets are the same, non-conventional financial assets are connected with more advanced technologies such as blockchain technology (Callens, 2021). Moreover, digital financial assets are intangible since they exist in digital form; as a result, they may lack regulatory clarity, display high volatility, and be subject to restricted investigation and evaluation. This decreases investor confidence (KPMG, 2022). Those who hold digital assets are thus more inclined to evaluate their utility and usability than those who do not. Consequently, they will likely take utility tokens.

A respondent's normal use of social media channels has a statistically significant impact on the adoption of utility tokens. The social media revolution has resulted in new ways to search for and collect information on the vast array of products and services available on the market. It has enabled quick customer engagement and brand dialogue (Powers et al., 2012). Digital acquaintances increasingly affect consumer feelings about items and services, which in turn influences offline decisions (Smith, 2009). Therefore, the use of social networks may also affect investors' adoption of utility tokens.

6. CONCLUSION

To accomplish the study's aims of investigating the factors influencing the adoption of utility tokens, a binary logistic regression was conducted. The study investigated whether demographic factors (gender, level of education, occupation, income, and savings), types of financial instruments that a respondent currently owned, and media that a participant usually accessed (types of mass media and social media platforms) influence Thai investors' adoption of utility tokens. The data demonstrate the influence of gender, level of education, income, savings, types of financial instruments, and social media platforms on the propensity of investors to accept utility tokens and invest in them. However, occupation and mass media have negligible effects on the adoption of utility tokens. Based on these findings, the paper suggests that fintech companies and other organisations that offer utility tokens should consider their clients' gender, level of education, income, and savings when designing marketing campaigns, as these variables have a significant impact on the adoption of utility tokens. As the level of acceptance goes down with increasing levels of advertisements directed education. at undergraduates may draw more new users than those aimed at graduate students. In addition, to enhance the acceptance of utility tokens by sophisticated investors, brokers or financial advisers must examine the customer's present financial holdings. Consequently, they can effectively build financial strategies and provide advice to their clients. This study makes a valuable contribution to the existing body of literature on the adoption of utility tokens by investors in a developing country. The study's findings hold significant implications for future research in this area by providing insights that can guide further investigations. Additionally, the outcomes of this research may assist scholars in expanding their research horizons by integrating additional elements that were not previously explored.

As with any study, there are limitations that should be acknowledged. This study examined only the relevance of each element in relation to the adoption of utility tokens; the reasons for each factor's significance were not investigated. For future research on this subject, therefore, an in-depth interview or a focus group interview may be used. This may provide insight into the reasons investors accept or reject utility tokens and other digital assets. By conducting interviews with experts in utility tokens or comparable sectors, it is possible to acquire an in-depth understanding of the investing usage of digital tokens. Furthermore, there may be new laws and regulations regarding utility tokens, as there have been recent debates in Thailand on the restrictions on ready-to-use utility tokens. Even though the results of carrying out a similar study in the future may turn out to be different from the results presented in this paper, it would still be worthwhile to repeat this study or even carry out a more in-depth investigation along the lines just suggested, with interviews.



REFERENCES

- 1. Albayati, H., Kim, S. K., & Rho, J. J. (2020). Accepting financial transactions using blockchain technology and cryptocurrency: A customer perspective approach. *Technology in Society, 62*, Article 101320. https://doi.org /10.1016/j.techsoc.2020.101320
- Benedetti, H., Caceres, C., & Abarzúa, L. (2023). Utility tokens. In H. K. Baker, H. Benedetti, E. Nikbakht, & S. S. Smith (Eds.), *The Emerald handbook on cryptoassets: Investment opportunities and challenges* (pp. 79–92). Bingley: Emerald Publishing Limited. https://doi.org/10.1108/978-1-80455-320-620221006
- 3. BNK48. (2022). BNK48 Whitepaper: IAM48 utility token & BNK governance token. https://www.bnk48.com/bnktoken/whitepaper/
- 4. Brooks, C., Sangiorgi, I., Hillenbrand, C., & Money, K. (2019). Experience wears the trousers: Exploring gender and attitude to financial risk. *Journal of Economic Behavior & Organization*, *163*, 483–515. https://doi.org/10.1016/j.jebo.2019.04.026
- 5. Callens, E. (2021). Financial instruments entail liabilities: Ether, bitcoin, and litecoin do not. *Computer Law & Security Review, 40*, Article 105494. https://doi.org/10.1016/j.clsr.2020.105494
- 6. Chathurika, D. M. D. (2020). Factors affecting intention to use cryptocurrencies with special reference to the university students in Sri Lanka. *Proceedings of the 17th International Conference on Business Management 2020, 17*, 1214–1229. https://doi.org/10.31357/icbm.v17.5202
- 7. DiStaso, M. W., & Mccorkindale, T. (2017). *The science of influence: How social media affects decision making in the healthcare, travel, retail, and financial industries.* Institute for Public Relations (IPR). https://instituteforpr.org/wp-content/uploads/Science-of-Influence-Report-1-1.pdf
- 8. Eckel, C. C., & Grossman, P. J. (2008). Men, women and risk aversion: Experimental evidence. In C. R. Plott & V. L. Smith (Eds.), *Handbook of experimental economics results* (1st ed., pp. 1061–1073). Elsevier. https://doi.org/10.1016/S1574-0722(07)00113-8
- 9. Widodo, T., & Umar, I. (2021). *Kependudukan, keluarga berencana dan pembangunan keluarga* [Population, family planning and family development]. Deepublish. https://deepublishstore.com/shop/buku-kependudukan/
- 10. Grobys, K., & Sapkota, N. (2020). Predicting cryptocurrency defaults. *Applied Economics*, 52(46), 5060–5076. https://doi.org/10.1080/00036846.2020.1752903
- 11. Harb, Y., & Alhayajneh, S. (2019). Intention to use BI tools: Integrating technology acceptance model (TAM) and personality trait model. *Proceedings of the 2019 IEEE Jordan International Joint Conference on Electrical Engineering and Information Technology (JEEIT)*, 494–497. https://doi.org/10.1109/JEEIT.2019.8717407
- 12. Hasan, N. (2020, July 8). *Logistic regression using SPSS* [PowerPoint slides]. University of Miami. http://surl.li/jcnmj
- 13. Hastings, J. S., Madrian, B. C., & Skimmyhorn, W. L. (2013). Financial literacy, financial education, and economic outcomes. *Annual Review of Economics*, *5*, 347–373. https://doi.org/10.1146/annurev-economics-082312-125807
- 14. Härdle, W. K., Harvey, C. R., & Reule, R. C. G. (2020). Understanding cryptocurrencies. *Journal of Financial Econometrics*, *18*(2), 181–208. https://doi.org/10.1093/jjfinec/nbz033
- 15. Jain, R., Prajapati, D., & Dangi, A. (2023). Transforming the financial sector: A review of recent advancements in FinTech. *International Journal for Research Trends and Innovation (IJRTI), 8*(2), 250–267. http://www.ijrti.org /papers/IJRTI2302043.pdf
- 16. KPMG. (2022, October). *Investing in digital assets: Family office and high-net worth investor perspectives on digital asset allocation.* https://assets.kpmg/content/dam/kpmg/cn/pdf/en/2022/10/investing-in-digital-assets.pdf
- 17. Kraiwanit, T. (2021). A multiplier of e-consumption: The study of the developing economy. *Journal of Governance & Regulation*, *10*(3), 85–92. https://doi.org/10.22495/jgrv10i3art7
- 18. Lambert, T., Liebau, D., & Roosenboom, P. (2022). Security token offerings. *Small Business Economics*, *59*, 299–325. https://doi.org/10.1007/s11187-021-00539-9
- 19. Limna, P., Kraiwanit, T., Jangjarat, K., Klayklung, P., & Chocksathaporn, P. (2023). The use of ChatGPT in the digital era: Perspectives on chatbot implementation. *Journal of Applied Learning and Teaching*, *6*(1), 64–74. https://doi.org/10.37074/jalt.2023.6.1.32
- 20. Lin, H.-W. (2011). Elucidating the influence of demographics and psychological traits on investment biases. *International Journal of Economics and Management Engineering (IJEME), 5*(5), 424–429. http://doi.org/10.5281 /zenodo.1081985
- 21. Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, *52*(1), 5–44. https://doi.org/10.1257/jel.52.1.5
- 22. Manasan, S. (2022, June 7). *Utility token bàep năi těung próm chái* [Which utility tokens are ready to use?]. Bangkokbiznews. https://www.bangkokbiznews.com/columnist/1008469
- 23. Marikyan, D., Papagiannidis, S., Rana, O. F., & Ranjan, R. (2022). Blockchain: A business model innovation analysis. *Digital Business, 2*(2), Article 100033. https://doi.org/10.1016/j.digbus.2022.100033
- 24. Mim, N. J., & Ahmed, S. I. (2020, April). Others' images: Online social media, architectural improvisations, and spatial marginalization in Bangladesh. *Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems*, 1–14. https://doi.org/10.1145/3313831.3376572
- 25. Parameswaran, S. K. (2022). Fundamentals of financial instruments: An introduction to stocks, bonds, foreign exchange, and derivatives (2nd ed.). Wiley.
- 26. Power, D. J., & Phillips-Wren, G. (2011). Impact of social media and Web 2.0 on decision-making. *Journal of Decision Systems*, *20*(3), 249-261. https://doi.org/10.3166/jds.20.249-261
- 27. Powers, T., Advincula, D., Austin, M. S., Graiko, S., & Snyder, J. (2012). Digital and social media in the purchase decision process. *Journal of Advertising Research*, *52*(4), 479–489. http://doi.org/10.2501/JAR-52-4-479-489
- 28. Prat, J., Danos, V., & Marcassa, S. (2021). Fundamental pricing of utility tokens (Working Paper n°2019-11). HAL Article 03096267. https://hal.science/hal-03096267
- 29. Prihatini, D. & Widakdo, D. S. W. P. J. (2022). Demographic factors, personality traits, and the performance of cryptocurrency traders. *Jurnal Minds: Manajemen Ide dan Inspirasi, 9*(1), 53–64. https://doi.org/10.24252 /minds.v9i1.27067

VIRTUS

- 30. Rodríguez Ramos, A. (2018). *Bitcoin and other cryptocurrencies as payment methods* [Master's thesis, Universidad Pontificia Comillas (ICADE)]. Universidad Pontificia Comillas Repository. http://hdl.handle.net/11531/32858
- 31. SABUY Tech. (2022, March 22). *About SABUY Digital*. https://www.sabuydigital.com/about/
- 32. Securities and Exchange Commission (SEC) (n.d.). *Investment products: Digital assets*. Retrieved from https://www.sec.or.th/th/pages/investors/digitalassetproduct.aspx
- 33. Seong, L. C., Khin, A. A., Cham, T. H., & Li, T. Y. (2021). BAFE044: Impact of demographic factors on the behavioural intention to adop cryptocurrency among Malaysia's millennials: An econometric approach. *Proceedings of the 9th International Conference on Business, Accounting, Finance and Economics (BAFE 2021)*, 541–558. http://surl.li/jcbyd
- 34. Shaengchart, Y., & Kraiwanit, T. (2023). Starlink satellite project impact on the internet provider service in emerging economies. *Research in Globalization, 6*, Article 100132. https://doi.org/10.1016/j.resglo.2023.100132
- 35. Shaengchart, Y., Kraiwanit, T., & Butcharoen, S. (2023). Factors influencing the effects of the Starlink satellite project on the internet service provider market in Thailand. *Technology in Society, 74*, Article 102279. https://doi.org/10.1016/j.techsoc.2023.102279
- 36. Shaengchart, Y., Kraiwanit, T., Virunhaphol, S., Chutipat, V., & Chaisiripaibool, S. (2023). Users' opinions on telecom mergers and acquisitions in a developing country. *Corporate & Business Strategy Review*, 4(1), 50-56. https://doi.org/10.22495/cbsrv4i1art5
- 37. Sarmah, S. S. (2018). Understanding blockchain technology. *Computer Science and Engineering*, 8(2), 23–29. http://surl.li/jbxsh
- 38. Sharma, T. K., (2022, September 8). Security tokens vs. utility tokens: A concise guide. Blockchain Council. http://surl.li/jbzdh
- Shirole, M., Darisi, M., & Bhirud, S. (2020). Cryptocurrency token: An overview. In D. Patel, S. Nandi, B. K. Mishra, D. Shah, C. N. Modi, K. Shah, & R. S. Bansode (Eds.), *IC-BCT 2019: Proceedings of the International Conference on Blockchain Technology* (pp. 133–140). Springer. https://doi.org/10.1007/978-981-15-4542-9_12
- Shrestha, B., Bajracharya, S. B., Keitsch, M. M., & Tiwari, S. R. (2020). Gender differences in household energy decision-making and impacts in energy saving to achieve sustainability: A case of Kathmandu. *Sustainable Development, 28*(5), 1049–1062. https://doi.org/10.1002/sd.2055
- 41. Singh, S., Sahni, M. M., & Kovid, R. K. (2020). What drives fintech adoption? A multi-method evaluation using an adapted technology acceptance model. *Management Decision*, *58*(8), 1675–1697. https://doi.org/10.1108/MD-09-2019-1318
- 42. Sitthipon, T., Limna, P., Jaipong, P., Siripipattanakul, S., & Auttawechasakoon, P. (2022). Gamification predicting customers' repurchase intention via e-commerce platforms through mediating effect of customer satisfaction in Thailand. *Review of Advanced Multidisciplinary Sciences, Engineering & Innovation, 1*(1), 1–14. http://surl.li/jcaih
- 43. Smith, T. (2009). The social media revolution. *Proceedings of the International Journal of Market Research*, *51*(4), 559–561. https://doi.org/10.2501/S1470785309200773
- 44. Stolper, O. A., & Walter, A. (2017). Financial literacy, financial advice, and financial behavior. *Journal of Business Economics*, *87*, 581–643. https://doi.org/10.1007/s11573-017-0853-9
- 45. Tardi, C. (2022, July 12). Understanding the different types of cryptocurrency. *SoFi*. https://www.sofi.com /learn/content/understanding-the-different-types-of-cryptocurrency/
- 46. Thienpreecha, K., Chanpen, Ö., & Partomtanasarn, S. (2022, June 30). Thailand's SEC proposes to regulate ready-to-use utility tokens. *Tilleke & Gibbins*. https://www.tilleke.com/insights/thailands-sec-proposes-to-regulate-ready-to-use-utility-tokens/
- Tönnissen, S., Beinke, J. H., & Teuteberg, F. (2020). Understanding token-based ecosystems A taxonomy of blockchain-based business models of start-ups. *Electron Markets*, 30, 307–323. https://doi.org/10.1007/s12525-020-00396-6
- Voramontri, D., & Klieb, L. (2019). Impact of social media on consumer behaviour. International Journal of Information and Decision Sciences, 11(3), 209–233. https://doi.org/10.1504/IJIDS.2019.101994
- 49. Warner, K. S., & Wäger, M. (2019). Building dynamic capabilities for digital transformation: An ongoing process of strategic renewal. *Long Range Planning*, *52*(3), 326–349. https://doi.org/10.1016/j.lrp.2018.12.001
- 50. Xi, D., O'Brien, T. I., & Irannezhad, E. (2020). Investigating the investment behaviors in cryptocurrency. *Journal* of Alternative Investments, 23(2), 141–160. https://doi.org/10.3905/jai.2020.1.108
- 51. Zipmex. (2021, September 13). Utility token. https://zipmex.com/th/en/glossary/utility-token/

VIRTUS