CRYPTOCURRENCY PLATFORM SELECTION IN THAILAND

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Abstract

This research aimed to investigate cryptocurrency platform selection of investors who trade cryptocurrency. Data were collected online from 648 people with the age of 18 years and above who use cryptocurrency platforms. The study result found education level, income, how to use, and platform could forecast the model correctly at 72 percent. It is recommended that platform developers who want to encourage users to use platforms should strengthen perceived usefulness by allowing users to perceive that the platforms enable them to trade cryptocurrency at any time and from any location, as well as encouraging users to perceive that the platforms have popular currencies and a diverse range of currencies. Furthermore, platform developers should improve perceived ease of use in applying and using by themselves, such as by preparing public relations media to promote perceived usefulness and perceived ease of use in order to ensure users have a positive attitude toward how to use the platforms. As E-banking experience and E-wallet experience were not brought to this study, an additional study on this matter should be conducted in future research.

Keywords: Cryptocurrency Trading, Selection, Platform

Introduction

Rapidly developing technologies are now driving the global economy and societies. Digital technologies are becoming increasingly important in society. Capital market products and services are increasingly being developed in digital form. Finance and capital markets are expanding at a rapid pace. Trading in the form of coins or banknotes gives rise to digital currency or cryptocurrency, which is a digital or virtual currency that is secured transactions by cryptography and used as a medium of exchange, making counterfeiting or double-spending nearly impossible. It is a decentralized digital currency based on blockchain technology (Grinberg, 2011; Limna et al., 2022; Raza et al., 2022). By spreading its operations across a network of computers, blockchain allows cryptocurrencies to operate without the need for a central authority, which does not depend on third-party mediators (Sonsuphap & Chutipat, 2020). Therefore, digital currencies increase interest and acceptance and are widely used, such as Bitcoin, Ethereum, and other digital currencies that gain confidence from investors across the world while digital currencies seem to increase in value (Coinmarketcap, 2021).

In Thailand, the rise in popularity of and attention paid to cryptocurrency can be seen from the number of 1,490,067 investor accounts in August 2021 (The Securities and Exchange Commission, 2021). By the time trading prices of digital currencies are higher, the number of new accounts shall increase according to a market situation. Currently, to open an individual account to trade cryptocurrency in Thailand, it can be done through digital asset businesses (Digital Asset Exchange) that are licensed from The Securities and Exchange Commission. In this regard, competition among digital asset exchanges on websites is quite high by the time the cryptocurrency market is popular. Each website tries to find outstanding features or differences of usage to attract as many users as possible. Service providers also develop a platform model for being able to support the operating system on smartphones or tablets, probably becoming advantages and benefits of digital asset exchange services including an alternative choice for users since at presents platforms play an important role in people's daily life as they are easily accessible from smartphones or tablets so as to facilitate demands of a higher number of users. Based on the basic form of cryptocurrency trading on websites, digital asset exchanges have developed platforms to

allow users to access and use them at any time. Each digital asset business needs to compete between each other for snatching more market share to ensure the most cryptocurrency trading shall take place the most on its platform. Consequently, cryptocurrency trading on platforms is a good choice since it is convenient and can be done at any time according to users' demands. Each platform offers a similar usability model, making users have different options for using cryptocurrency trading platforms, leading to competition among companies creating platforms (Khitasanga & Kraiwanit, 2021; Yan et al., 2022).

Objectives of the Study

1. To study demographic characteristics affecting cryptocurrency trading of investors in Thailand
2. To study platform using behaviors affecting cryptocurrency trading of investors in Thailand

Scope of the Study

The scope of the research on factors affecting cryptocurrency platform selection included Bitkub, Satang Pro, Huobi, ERX, Zipmex, Upbit, Z.comEX (The Securities and Exchange Commission, Thailand, 2021).

Conceptual framework

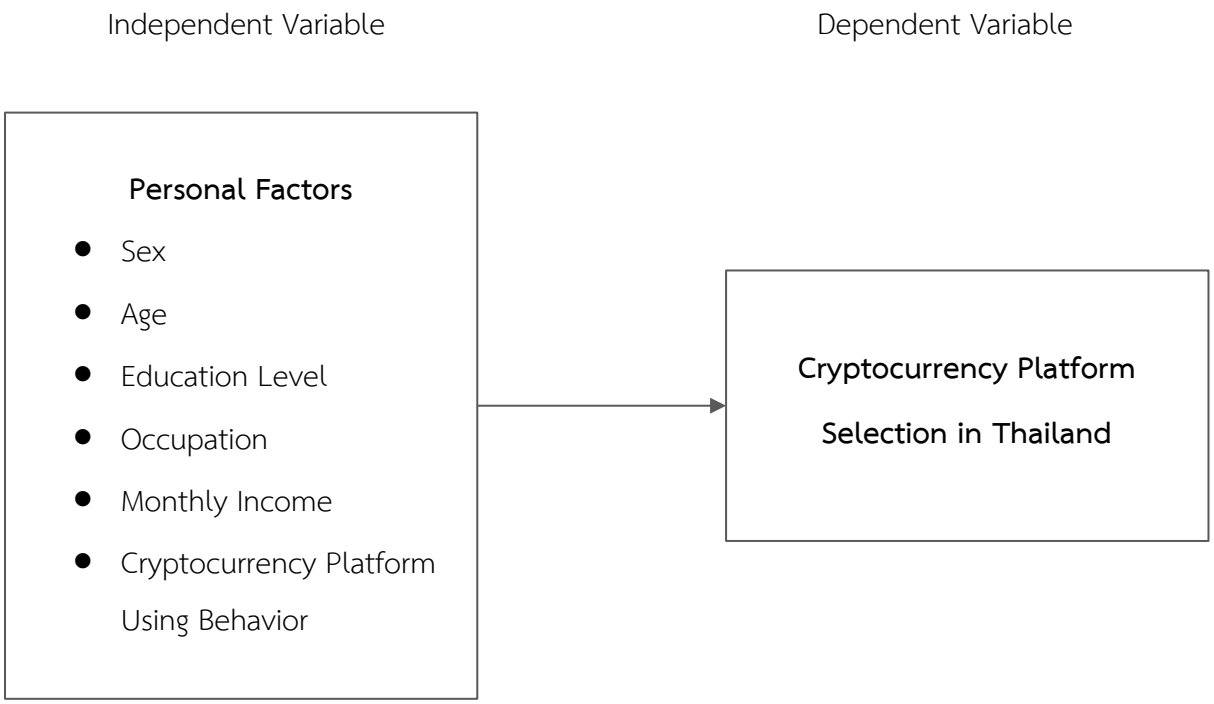

Figure 1 Conceptual Framework

Literature Review

The researchers reviewed literature about demographic characteristics, namely, various backgrounds of each individual, i.e. sex, age, education level, career, monthly income, marital status. These factors reveal an individual's background from the past till present. Individuals with different demographic characteristics shall have different decision-making styles.

According to Hayes (2021) and Mouna and Jarboui (2022), demography is the study of a population, or the total number of people or organisms in a given area. Demographic analysis is the study of a population's characteristics such as age, race, and gender. Demographic data is a statistical representation of socioeconomic information such as employment, education, income, marriage rates, birth and death rates, and so on. Understanding how population characteristics such as size, spatial distribution, age structure, or birth and death rates change over time can aid scientists and governments in making decisions. Engel, Blackwell, and Miniard (1990) described that consumer behavior refers to all actions directly associated with provision of consumption and purchase of goods and

services including the process of decision making that takes place before and after those actions. Moreover, Schiffman and Kanuk (1987) explained that consumer behavior is behaviors expressed by consumers, ranging from searching for, purchasing, evaluating or consuming produces or services, including any concept that consumers expect to be responded. It is a study on consumers' decision making in consuming existing resources, in terms of money, time, and power to consume products and services, consisting of questions, such as what to buy, why to buy, when to buy, where to buy, how to buy, and how often to buy.

Srinuan (2016) studied individual factors, investment behavior, and investment motivation affecting investment decision making in the Stock Exchange of Thailand. The study aimed 1) to study differences of individual factors influencing investment decision making in the Stock Exchange of Thailand, 2) to study investment behavior influencing investment decision making in the Stock Exchange of Thailand, 3) to study motivation influencing investment decision making in the Stock Exchange of Thailand. The study result showed most of the questionnaire respondents were men, aged between 40 and 59 years old, married, graduated with a bachelor's degree, had 50,001 baht and above monthly income, self-employed, and had 4 to 5 years investment experience. Investment behavior and work motivation had an influence on investment decision making in the Stock Exchange of Thailand with statistical significance level of 0.05.

Teerasakdapong (2016) studied factors affecting Bitcoin selection. The study aimed to study the current situation in using Bitcoin in Thailand, to identify factors affecting Bitcoin selection, and to be used as a case study for the future of financial innovation. The study was conducted on the basis of a quantitative study design and 445 copies of the questionnaire were used for data collection. The sample was investors in Thailand. The study result found that awareness factor had a negative effect on interest in selecting Bitcoin. Factors related to trust, ecosystem, and virtual currency had a positive effect on interest in selecting Bitcoin. The last factor was innovation acceptance which did not have an effect on Bitcoin selection with a statistical significance level of 0.10. Bitcoin is in the early adoption stage. Most users are forward-thinking people who quickly welcome new innovation and trends. They always see benefits from technologies and trends. They love to take risks and search for profit since Bitcoin's return is the major factor encouraging people to select Bitcoin, followed by its newness and it is not under the control of the government.

Research Methodology

This quantitative research employed closed-ended questionnaires (Likert's Rating Scale) for data collection. The questionnaire items were developed by the researchers based on previous research. Furthermore, the questionnaire was tested on 30 respondents (pre-testing) for a dedicated questionnaire. Measuring instruments' reliability and validity were also evaluated. If reliability is greater than 0.6, the questionnaire can be used for collecting data further (Shrestha, 2021). According to Sürücü and Maslakçi (2020), it is crucial to comprehend that the validity of an instrument refers to how well it measures the researcher's conceptual framework or hypothesis.

Population and Sample

The study's target population was unknown. The samples were people who used platforms to trade cryptocurrency, people who used Bitkub platform and people who used other platforms. The researchers conducted a traditional survey with a 95% confidence level. A minimum of 385 cases with a p-value of 0.05 could be obtained through convenience sampling for the inferential statistics (Napawut et al., 2022; Sitthipon et al., 2022). Thus, convenience sampling was employed. This study included 648 participants.

Research Instrument

The online questionnaires were divided into three sections. The first section included questions about respondents' demographic characteristics. The questions were in the form of closed-ended checklist questions, such as gender, age, education level, and average monthly income. The second section included questions about how people use cryptocurrency trading platforms. The third section included questions about making decisions when choosing a cryptocurrency trading platform.

Data Collection

The data were collected from the online questionnaire survey responded by people who use platforms to trade cryptocurrency; people who use Bitkub platform and people who use other platforms. The data were collected between April 2022 and June 2022. In this study, secondary data were gathered from study documents, articles, and research on knowledge and understanding of the DeFi system, as well as listening to interviews,

seminars, and podcasts. Moreover, the researchers also interviewed well-informed people about a specific topic in order to obtain detailed and accurate answers about the topics that were requested.

Data Analysis

The data obtained from the online surveys were analyzed using a statistical data analysis software. The values for each variable and questionnaire item were calculated using the mean and standard deviation. Percentage was used to analyze the demographic data from the section one: sex, age, education level, career, and average monthly income. Logistic regression analysis was employed for hypothesis testing. To test statistical significance, Wald statistic was used. Moreover, the ratio of the maximum likelihood function of full model and simple model were used to test the model by transforming the ratio using log and likelihood-ratio test statistics. Hosmer-Lemeshow Goodness of Fit Test was used to test model appropriateness.

Results

General characteristics of data as independent variables are shown in the tables below.

Table 1 Number and percentage classified by gender

Sex	Number	Percent
Male	39	61.5
Female	244	38.5
Total	**634**	**100**

According to Table 1, there are 39 males (61.5%) and 244 females. The total number is 634 persons (100%).

Table 2 Number and percentage classified by age

Age	Number	Percent
< 20 years	176	27.8
21-30 years	270	42.6
31-40 years	104	16.4
41-50 years	76	12.0
>50 years	8	1.3
Total	**634**	**100**

According to Table 2, there are 176 people (28.8%) with the age below 20 years, 270 people (42.6%) aged 21-30 years, 104 people (16.4%) aged 31-40 years, 76 people (12%) aged 41-50 years, 8 people (1.3%) aged 50 years and above. The total number is 634 people (100%).

Table 3 Number and percentage classified by education level

Education	Number	Percent
Below bachelor's degree	122	19.2
Bachelor's degree	396	62.5
Master's degree or higher	116	18.3
Total	**634**	**100**

According to Table 3, there are 122 people (19.2%) with a below bachelor's degree, 365 people (62.5%) with a bachelor's degree, 116 people (18.3%) with a master's degree or higher. The total number is 634 people (100%).

Table 4 Number and percentage classified by career

Career	Number	Percent
Government officer	16	2.5
State enterprise employee	4	0.6
Private company employee	174	27.4
Self-employed	64	10.1
University student	376	59.3
Total	**634**	**100**

According to Table 4, there are 16 people (2.5%) who are government officers, 4 people (0.6%) are state enterprise employees, 174 people (27.4%) are private company employees, 64 people (10.1%) are self-employed, 376 people (59.3%) are university students. The total number is 634 people (100%).

Table 5 Number and percentage classified by average monthly income

Average monthly income	Number	Percent
10,000 Baht or lower	176	27.8
10,001 - 20,000 Baht	194	30.6
20,001 – 30,000 Baht	62	9.8
30,001 – 40,000 Baht	42	6.6
40,001 Baht or higher	160	25.2
Total	**634**	**100**

According to Table 5, there are 176 people (27.8%) had average monthly income less than 10,000 baht, 194 people (30.6%) had average monthly income 10,001 - 20,000 baht, 62 people (9.8%) had average monthly income 20,001 - 30,000 baht, 42 people (6.6%) had average monthly income 30,001 - 40,000 baht, 160 people (25.2%) had average monthly income more than 40,001 baht. The total number is 634 people (100%).

Table 6 Number and percentage classified by using platforms

Using platforms	Number	Percent
Ever	634	100
Never	0	0
Total	**634**	**100**

According to Table 6, there are 634 people (100%) who used platforms and 0 people (0%) never used platforms. The total number is 634 people (100%).

Table 7 Number and percentage classified by how often they use platforms

How often of using platforms	Number	Percent
Occasionally	84	13.2
Once a week	34	5.4
1 - 5 times a week	204	32.2
Every day	308	48.6
Others	4	0.6
Total	**634**	**100.0**

According to Table 7, there are 84 people (13.2%) who occasionally used platforms, 34 people (5.4%) used platforms once a week, and 204 people (32.2%) used platforms 1 - 5 times a week, 308 people (48.6%) used platforms every day, and 4 people (0.6%) used other platforms. The total number is 634 people (100%).

Table 8 Number and percentage classified by cryptocurrency platforms

Cryptocurrency platforms	Number	Percent
Bitkub	204	32.82
Other platforms	430	67.80
Total	**634**	**100.0**

According to table 8, there are 204 people (32.82%) who selected Bitkub platform while 430 people (67.80%) selected other platforms.

Table 9 Coefficient of predicted value of significant variables

	B	S.E.	Wald	df	Sig.	Exp(B)
Education level	.957	.203	22.260	1	.000	2.605
Monthly income	-.472	.086	30.225	1	.000	.623
Platform usage	.265	.081	10.665	1	.001	1.303
Platform	-.570	.055	107.115	1	.000	.566

According to table 9, significant independent variables are education level, monthly income, platform usage, and platforms, which can explain the dependent variable (platform selection) at the statistical significance level of 0.05. It means that when a change in monthly income occurs, platform selection decreases 37.7% (calculated from 0.623 – 1*100). A one-time increase in using platforms enables platform selection to increase 1.303 times. A one-level increase in education level enables platform selection to increase 2.605 times. A decrease in cryptocurrency platforms enables cryptocurrency platform selection to decrease by 43.4% (calculated from 0.566 – 1*100).

Table 10 Verification of predicted value

Observed value			Predicted value		
			Platform selection		Percentage of total accuracy
			Others	Bitkub	
Step 1	Platform selection	Others	352	74	82.6
		Bitkub	110	92	45.5
	Percentage of total accuracy				70.7

a The cut value is .500

According to Table 10, the percentage of total accuracy of predicted value is 70.7. Predicted value greater than 0.5 is determined as 1, Bitkub platform users, and predictive value lower than 0.5 is determined as 0, other platforms users.

Conclusion and Discussion

Education level, monthly income, platform usage, and platforms are four independent variables that can describe the dependent variable with a statistical significance level of 0.05, whereas other variables, such as gender, age, and career, are not significant. However, when all seven variables are entered into the model for prediction with a cut value of 0.5, they can correctly predict the model 70.7%. In the second method, significant variables include education level, monthly income, platform usage, and platforms, and they can correctly predict the model by 72%. Tamphakdiphanit and Laokulrach (2020) identified the evolution of cryptocurrency regulations in Thailand as well as the influences on people's intentions to use cryptocurrency. Thai people's intentions to use cryptocurrency were influenced indirectly by their educational level and age. Moreover, this research is consistent with the study conducted by Srinuan (2016) on individual factors, investment behavior, and investment motivation affecting investment decision making in the Stock Exchange of Thailand. The study aimed 1) to study differences of individual factors influencing investment decision making in the Stock Exchange of Thailand, 2) to study investment behavior influencing investment decision making in the Stock Exchange of Thailand. The study result found that most of the respondents who are women aged between 21 and 30 years old, graduated with a bachelor’s degree, with monthly income between 10,001 and 20,000 baht, university students and had experience in using platforms. Investment behavior and investment motivation had an influence on investment decision making in the Stock Exchange of Thailand with the statistical significance level of 0.05.

Suggestions

The study on factors affecting cryptocurrency platform selection found the significant independent variables are education level, monthly income, platform usage, and platforms can correctly predict the model by 72%. Suggestions are as follows:

1. In terms of business suggestions, platform developers who would like to promote the attitude towards using platforms should strengthen perceived usefulness by letting users perceive that the platforms enable them to trade cryptocurrency at any place and any time, including encouraging users to perceive that the platforms have popular currencies and diversity of currencies. In addition, platform developers should enhance perceived ease of use in applying and using by oneself, such as preparing public relations media to promote

perceived usefulness and perceived ease of use to ensure users have a positive attitude towards how to use the platforms.

2. In terms of academic suggestions, E-banking experience and E-wallet experience were not brought to this study. Thus, an additional study on this matter should be conducted in future research.

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