

# The Perception of Cambodian Users Towards Cryptocurrency Exchange Application

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## Abstract

This research aimed to investigate the factors that influenced the adoption of Cryptocurrency Exchange Applications (CEA) in Cambodia, specifically in terms of behavioral intentions and user behaviors towards users. An empirical study was conducted, utilizing an established technology acceptance model, namely the Unified Theory of Acceptance and Use of Technology (UTAUT), along with its extension, the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2). Trust was also included as an external variable under the UTAUT2 model to provide additional insights into the study. A quantitative method was employed, with 400 respondents through Google survey questionnaires from Crypto- and Blockchains-Community Social Media Channels in Cambodia. The obtained results were analyzed using the advanced license program, “Smart-PIs 4.0”, generating support for each construct model. PLS-SEM was also used to measure the reliability and validity of hypothesized variables. The study revealed that Habit (HT), Performance Expectancy (PE), and Trust (TR), except Effort Expectancy (EE), Facilitating Conditions (FCs), Hedonic Motivation (HM), Perceived Value (PV), and Social Influence (SI) significantly influenced the adoption of Cryptocurrency Exchange Application in Cambodia. The author also discussed the theoretical and managerial implications, limitations, and recommendations for future research. The findings of this study provided valuable insights for individuals and organizations involved in the adoption of cryptocurrency and related applications in Cambodia. This study was limited by legal considerations; however, it was observed that the government of Cambodia has expressed a favorable stance toward the legalization and regulation of cryptocurrencies and underlying blockchain technology.

**Keywords:** Crypto-Exchange Application, Cryptocurrency, Perception, Users

## Introduction

In terms of cryptocurrency, Cambodia has adopted a restrained stance. In 2019, the National Bank of Cambodia (NBC) implemented a directive that prohibited all cryptocurrency

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transactions in the country, with financial institutions and payment processors enforcing this ban. This restriction only prohibits institutional investment or regulation, as an individual investment is permissible (Standard Insights, 2022). Recently, NBC has also alerted the public to cryptocurrency investment fraud and released guidelines for digital currency service providers, requiring anti-money laundering and customer due diligence provisions. Despite this cautious approach, the government intends to develop its own Central Bank Digital Currency (CBDC) as announced by NBC in 2019, which could have significant implications for Cambodia's payment systems. Local payment processors, such as Wing Money and TrueMoney, and international exchanges such as Binance and Kucoin, are significant players in the country's cryptocurrency industry. While local payment processors have instituted Know Your Customer (KYC) protocols, international exchanges are accessible for their ease of use and global reach. In November 2022 (Standard Insights, 2022), a survey of 500 Cambodians was conducted, revealing that 10.63% had experience with cryptocurrency. In contrast, 21.25% of respondents remained unfamiliar with this type of currency, while 68.12% reported not using it. Notably, while the Cambodian Riel was the more prevalent currency, over half (56.17%) of those surveyed utilized US dollars. Only a small fraction (0.57%) of individuals conducted transactions using cryptocurrency.

To date, the Cambodian government has displayed a positive outlook toward the legitimization and control of cryptocurrencies and related blockchain technology. This can be seen in the proactive actions taken by the Securities of Exchange Regulator of Cambodia (SERC) to establish partnerships with private entities, including Binance, to maximize the efficacy of legislative policies. In June of 2023, Binance and SERC entered a memorandum of understanding to collaborate on the formation of digital assets regulations in Cambodia (Khmer Times, 2022). To this end, SERC intends to benefit from Binance's proficiency and practical know-how in the field to craft its own regulatory framework for the digital asset industry.

## **Research Objectives**

This study is focused on examining the perceptions of Cambodian Crypto-Exchange application users regarding the use of crypto-exchange applications in the field of cryptocurrency trading and investing. Specifically, it aims to investigate the views of Cambodian Crypto-Exchange application users with respect to the market's evolution between 2017 and 2021. There are two key objectives of this study:

1. To analyze user demographics, financial status, and perception of investing and trading on Crypto-Exchange applications.
2. To examine the market trends and factors that drive users to utilize Crypto-Exchange applications.

## **Literature Review**

This paper provided an overview of crypto-exchange applications, blockchain, and cryptocurrency, followed by an examination of the current theories looking into the acceptance of IT systems and the intentions to use crypto-exchange applications. Technically, the UTAUT (Venkatesh et al., 2003) illustrated the degree of acceptance when utilizing a new IT, and UTAUT2 was designed to specifically assess user intentions from a consumer-oriented point of view (Venkatesh et al., 2012).

**Perception, Cryptocurrency, and Crypto-Exchange Application**

Digital currency has emerged as a game-changer in the banking industry, providing customers with access to financial services anytime and anywhere. Its success depends largely on how users perceive it. Perception was defined as “the process by which an individual selects, organizes, and interprets stimuli to create a meaningful and coherent picture of the world”. Based on this definition, it can be inferred that perception plays a critical role in shaping users’ expectations and experiences of Crypto exchange applications. Several studies have investigated the impact of user perception on the adoption and usage of Crypto-exchange applications. According to Kim and Widdows (2019), there is a positive relationship between users’ perceived usefulness, perceived ease of use, and their intention to use the applications. In other words, users are more likely to adopt and use the applications if they perceive them as being useful and easy to use. Cryptocurrency is a digital or virtual currency that uses cryptography for security and operates independently of a central bank. It is a decentralized means of exchanging value, where transactions are recorded on a public ledger called the blockchain. Blockchain technology is a shared database that uses security technologies, such as cryptography, hash, and digital signature, to create, record, store, and verify transaction data without the need for a third-party intermediary. It provides the structure to realize various applications based on a distributed network with ensured reliability and integrity of transactions. In 2008, Satoshi Nakamoto initiated the thought of a digital currency based on a peer-to-peer (P2P) structure, leading to the debut of Bitcoin, the world’s first cryptocurrency, on January 3rd, 2009. The crypto-exchange application works based on the combination of blockchain technology and other existing software technologies to implement smart contracts, in which it functions automatically in the form of a digital-technological base solution by using the existing traditional financial concept. The dawn of smart contracts has revolutionized numerous applications in various industries such as FinTech (Financial Technologies), sharing economies, healthcare, science, government, and law. One of the main applications of smart contracts is crowdfunding.

**Performance Expectancy (PE)**

Performance Expectancy (PE) is seen as the individual’s perception of the benefit they will get from using a specific technology in their activities (Tai and Ku, 2013; Venkatesh et al., 2012). This idea conveys the extent to which somebody regards their performance to the utilization of technology (Chiao-Chen, 2013). Previous investigations have demonstrated a connection between performance desire and conduct intention that is varied by age and gender, with more youthful individuals and male individuals appearing to be somewhat more cognizant of the use of new technology (Venkatesh et al., 2003; Yousafzai & Yani-de-Soriano, 2012). It has also been composed that individuals who have higher educational backgrounds are more inclined to adopt new technology than those with less education (Krueger, 1993; Wozniak, 1984; Welch, 1970; Lleras-Muney & Lichtenberg, 2002). From the perspective of a consumer, when they believe that the services giving cryptocurrency trade, exchange and exchange are quicker and more available than other applications they will be more likely to utilize the service. Because of this, this study theorizes that a higher level of performance expectation will bring about a higher adoption intention of the crypto-change application services. Thus, the hypothesis of this research is that:

H1. PE significantly affects BI to adopt CEA.

**Effort Expectancy (EE)**

Effort Expectancy (EE) is defined as the ease with which efforts result from using new technology (Plouffe et al., 2001; Venkatesh et al., 2003). This research suggests that if users find the crypto-exchange application easy to learn and use, as well as easy to navigate, it may influence their intention to continue using it. It has been noted by scholars that gender, age, and educational level play a role in the link between effort expectancy and behavior intention with higher education users more likely to use and accept new technology than those without (Venkatesh et al., 2003; Pijpers & van Montfort, 2005; Al-Gahtani et al., 2007). This leads to the following hypothesis:

H2. EE significantly impacts the BI to adopt CEA.

**Social Influence (SI)**

Social influence (SI) has a role to play in a user's intent to use a given technology (Venkatesh et al., 2003). Studies have found that if a person's acquaintances use mobile apps for payments, they are likely to do the same (Khalilzadeh et al., 2017). Beyond that, gender, age, experience, and educational level can also be seen to have a positive effect on the connection between social influence and an individual's behavioural intention to adopt an innovation (Venkatesh et al., 2003). Therefore, it is predicted that if individuals within a user's social circle are using a crypto-exchange application (CEA) or the application is recommended to them by someone they trust, their proclivity to use the technology will be greater than that of individuals in the same position without such an influence. So, social influence plays an important function in BI to adopt CEA.

Therefore, the hypothesis can be proposed that:

H3. Social Influence (SI) has a significant effect on BI's adoption of CEA.

**Facilitating Conditions (FCs)**

Facilitating conditions refer to the resources or support systems that are present to assist users in the implementation of new technology (Venkatesh et al., 2003, 2012). Research has indicated that people, particularly women, find the transition to new, more complicated technology harder (Plude & Hoyer, 1985; Henning & Jardim, 1977; Venkatesh & Morris, 2000). Users who have more experience with the technology can gain better knowledge and more comfort in using it (Alba & Hutchinson, 1987). FCs thus denote the level of control a user has over the technology and can positively influence their behavioral intention of adopting it (Ajzen, 1991). It can thus be stated that:

H4. FCs have a significant effect on the BI to adopt CEA.

**Hedonic Motivation (HM)**

Hedonic motivation (HM) is the feeling that users observe when using a certain technology to be entertaining and enjoyable (Brown & Venkatesh, 2005; Venkatesh et al., 2012). In a study, the UTAUT2 model was employed and it was revealed that hedonic motivation has a substantial impact on customer's intention to use Airbnb services (Lin et al., 2017). Furthermore, in the customer context, hedonic motivation has been a pivotal factor that determines technology acceptance and use (Brown & Venkatesh, 2005; Childers et al., 2001). However, it is also noteworthy that the effect of hedonic motivation on behavioral intention varies with age, gender, and experience as users differ with respect to innovativeness, novelty-seeking, and the perception of the novelty of a given technology. When customers first take up a specific technology, they become more aware of its originality (Holbrook & Hirschman,

1982). With an escalation in their familiarity, users tend to use the technology for utilitarian enjoyment where age and gender conclusively influence their utilization of the pioneering technology. Consequently, the hypothesis is reasonable to conjecture that:

H5. HM significantly impacts the BI to accept CEA.

#### **Perceived Value (PV)**

Perceived Value (PV) is the idea of an individual's cognitive weighing of the benefits of using a crypto-exchange application versus the costs, such as device costs, service costs, and transaction costs (Baptista & Obleira, 2015; Brown & Venkatesh, 2005; Dodds et al., 1991; Venkatesh et al., 2012). Studies have shown that cost/price plays a major role in user behavior toward a given product or service (Zeithaml, 1988). If the perceived value outweighs the monetary cost, users are more likely to adopt new technology. Additionally, differences in price preferences have been observed between men and women, and younger and older individuals (Bakan, 1966; Deaux & Lewis, 1984). Thus, the following hypothesis is proposed:

H6. PV significantly impacts BI toward CEA adoption.

#### **Habit**

Habit is seen as behavior that is performed regularly to reach particular goals or meet desired expectations (Orbell et al., 2001; Venkatesh et al., 2012). Recent analysis has suggested that habitual practice is an influential and reliable factor for predicting future trends in the use of technology (Kim & Malhotra, 2005). A study has unveiled that recurrent utilization of social media sites has an affirmative effect on individuals' willingness to share their experiences of consuming a new application (Herrero & San Martin, 2017). Thus, necessary to highlight that the intervention of habit can come from people's everyday utilization of smart devices or frequent employment of mobile applications in daily tasks. Habit has been confirmed to have a positive influence on the intention to use and adoption of the actual use of technology (Venkatesh et al., 2012). Yet, some reports point out the negative nature of habit on the intention to use and adoption of net applications. In line with these findings, it has been suggested that users' frequent usage of mobile cryptocurrency programs for trading/investing in cryptocurrency will significantly impact their intention and adoption to go on utilizing the applications in the future. As such, the following hypothesis is framed in order to examine these variables: H7a. Habit (HT) significantly affects BI toward CEA adoption.

H7b. Habit (HT) positively affects UB toward CEA adoption.

#### **Trust**

Trust is defined as the trustworthiness, dependability, genuineness, secrecy, durability, and capacity of one's feelings toward a specific individual, company, or program (Eisenstadt, 1995). Research has shown that customers are more likely to use online banking when conventional banking channels are trusted. It is presumed that an individual's interaction with IT systems will enhance their perceived trust. Additionally, trust is related to traceability, in that users can experiment with the technology before deciding whether or not to use it (Bennett & Bennett, 2003). Sahoo and Pillai (2017) highlighted that an individual's trust in a banking application should drive their intention to make use of it, as it is a key element of customer satisfaction on the internet. This suggests that users' trust in a trading/investing application for cryptocurrencies could greatly affect their objective to keep bringing it into use in the future. Trustworthiness plays a crucial role in determining how frequently people will make use of a cryptocurrency exchange application. Hence, the following hypothesis has been proposed:

H8. Trust (TR) has a significant impact on the adoption of CEA.

**Behavioral Intention (BI)**

Behavioral intention conveys an individual's likelihood of exploiting something in any given context. Thus, understanding the new system, its services, attributes, and what other people think about the new system are critical elements that sway users' intention to adopt or not to adopt the new system and utilize it (Wang et al., 2006):

H9. BI will notably influence Use Behavior to embrace CEA.

**Research Methodology****Sampling and data collection**

The survey questionnaire items were designed to measure a respondent's perception based on the constructs embedded in the proposed conceptual model, using a 5-point Likert Scale (Johns, 2010) ranging from "1" = strongly disagree to "5" = strongly agree. The survey was composed of two sections, written in English, and given to respondents. Section one contained questions about demographic information, knowledge of cryptocurrency, and usage experience. Section two contained questions that related to the concepts of the proposed model.

In February 2022, a pilot study was executed to identify any shortcomings present in a questionnaire. A group of 40 individuals were selected for the pilot study following the validation of the questionnaire. Several recommendations were provided concerning the phrasing and general organization of the questionnaire. These suggestions were evaluated, and a number of changes were implemented. Data from the pilot survey were not included in the primary survey.

To obtain responses, a total of 250 links were circulated through crypto users and social media channels via Telegram and Facebook. The survey received 430 responses which were subjected to refining, ultimately leading to 400 responses suitable for analysis. Only respondents who had experience with cryptocurrency exchange mobile applications aged between 21 and 50 years were included in the analysis.

This research employed the random sampling method with various selection techniques in which sample members were selected by chance. In addition, this research utilized a simplified formula to calculate sample sizes suggested by Yamane (1973). This formula was used to calculate the sample sizes Where,  $n$  = number of samples,  $N$  = total population, and  $e$  = error acceptance (5%) as follows:

$$n = \frac{N}{1+N(e)^2}$$

The study population in this research was cryptocurrency investors and traders in Binance's cryptocurrency community, making up 6000 people in Cambodia (Binance, 2022). According to Yamane (1973), the sample used in this study was 375 samples using the formula for calculating the sampling group with a 95% confidence level. The calculated sample size was 375 samples by adding 25 sample collection cases to prevent possible mistakes. Therefore, the sample size was approximately 400 respondents suitable for this study.

**Data Analysis**

Data analysis is the step after data were collected from 400 respondents within cryptocurrency communities in Cambodia. Descriptive analysis was used to convert data into descriptive information to help the researcher comprehend, interpret, organize, describe, and

manipulate the data collection. The method employed in information investigation was Partial Least Squares Structural Equation Modeling (PLS-SEM). The resulting data set was used to interpret and draw a conclusion by using license SmartPLS4 professional software with one-month license number: PRO-S7ABB7C98X-6B468BC5BB084C6E8636401D81BA1048784 as the primary software for data analysis in this research (Ringle et al., 2015).

## Research Results

### Descriptive Statistics for the Demographic Factors

A demographic analysis of the 400 respondents was conducted to have a better understanding of the survey results. The descriptive statistic for these respondents is presented in the table below.

**Table 1** Demographic Results

Demographic	Items	Frequency	Percentage
Gender	Male	294	73.5
	Female	105	26.25
	Not specific	1	0.25
Age (In the year)	21-30	279	69.75
	31-40	96	24
	41-50	19	4.75
Marital Status	Single	298	74.50
	Married	91	22.75
	Divorced	11	2.75
Educational Level	High School Diploma	70	17.50
	Bachelor's Degree	272	68.00
	Master's Degree	58	14.50
Occupation	Student	125	31.25
	Business Owner	25	5.75
	Private Sector	125	31.25
	Government Sector	25	5.75
	Self-employed	98	24.5
	Others	6	1.5
Monthly Income (USD)	Less than 250	123	30.75
	251-500	92	23
	501-1,000	145	36.25
	1,001-2,000	39	9.75
	More than 2,000	1	0.25
Frequency of Use	Daily	232	58
	Weekly	77	19.25
	Monthly	65	16.25
	Yearly	26	6.5
Average of trading volume (USD)	\$250 or less	203	51.13
	\$251- \$500	129	32.49
	\$501-\$1000	48	12.09
	\$1001-\$2000	7	1.76
	More than \$2000	10	2.52

**Source:** The author's calculation

### Reliability Analysis

Sekaran and Bougie (2016) reported that a Cronbach's Alpha score of 0.80 or above suggests excellent reliability, while scores ranging between 0.70 and 0.80 imply good reliability, with 0.60 to 0.70 indicating fair reliability and scores below 0.60 representing poor reliability. Hence, a Cronbach's Alpha score ( $\alpha' > 0.60$ ) is acceptable.

**Table 2** Understanding of Cronbach's Alpha

Level of Reliability	Cronbach's Alpha Ranges
Poor reliability	Less than 0.6
Fair Reliability	$0.60 < \alpha' < 0.70$
Good Reliability	$0.70 < \alpha' < 0.80$
Very Good Reliability	$0.80 < \alpha' < 0.95$

**Source:** Sekaran and Bougie's (2016) book, *Research Methods for Business: A Skill Building Approach*, equips the reader with the necessary proficiency to undertake productive research.

The findings, as presented in Table 3, demonstrate that composite reliability falls between 0.796 to 0.874, exceeding the preferred value of 0.5 and thereby indicating the internal consistency of the model. Additionally, to ensure the indicators for variables showed convergent validity, Cronbach's alpha was utilized. As shown in Table 4.10, the results of Cronbach's Alpha Coefficient range from 0.62 to 0.808, indicating acceptable levels of reliability and validity for all ten factors. Based on the findings, it can be concluded that all ten factors are reliable, with an average variance extracted (Pvc.) greater than 0.5.

**Table 3** The Measurement Model (n = 400)

Constructs	Items	Factor Loading	Composite Reliability	Cronbach's Alpha	AVE
Behavioral Intention (BI)	BI1	0.772	0.855	0.745	0.663
	BI2	0.833			
	BI3	0.836			
Effort Expectancy (EE)	EE1	0.736	0.874	0.808	0.635
	EE2	0.827			
	EE3	0.815			
	EE4	0.807			
Facilitating Conditions (FCs)	FC1	0.749	0.853	0.77	0.592
	FC2	0.808			
	FC3	0.75			
	FC4	0.768			
Hedonic Motivation (HM)	HM1	0.739	0.796	0.62	0.566
	HM2	0.804			
	HM3	0.712			
Habit (HT)	HT1	0.816	0.815	0.659	0.595
	HT2	0.763			
	HT3	0.732			



**Table 3** The Measurement Model (n = 400) (Con.)

Constructs	Items	Factor Loading	Composite Reliability	Cronbach's Alpha	AVE
Performance Expectancy (PE)	PE1	0.586	0.841	0.745	0.573
	PE2	0.848			
	PE3	0.809			
	PE4	0.759			
Perceived-Value (PV)	PV1	0.753	0.818	0.671	0.6
	PV2	0.788			
	PV3	0.782			
Social Influence (SI)	SI1	0.734	0.811	0.689	0.518
	SI2	0.754			
	SI3	0.741			
	SI4	0.647			
Trust (TR)	TR1	0.785	0.853	0.771	0.593
	TR2	0.798			
	TR3	0.763			
	TR4	0.731			
Use Behavior (UB)	UB1	0.711	0.833	0.732	0.555
	UB2	0.803			
	UB3	0.711			
	UB4	0.751			

**Source:** The author used SmartPLS4 software for calculation.

Table 4 displayed the correlation coefficients between the various constructs, with the diagonal values representing the square root of the average variance extracted (AVE). The Fornell-Larcker criterion specified that the AVE of each construct would be higher than the correlations between that construct and other constructs in the model, indicating adequate discrimination validity.

Overall, the data suggested that most of the constructs had adequate discrimination validity, with the AVE for each construct being higher than its correlations with other constructs.

**Table 4** Discrimination Validity: Fornell-Larcker Criteria

Constructs	BI	EE	FCs	HM	HT	PE	PV	SI	TR	UB
BI	<b>0.814</b>	-	-	-	-	-	-	-	-	-
EE	0.681	<b>0.797</b>	-	-	-	-	-	-	-	-
FCs	0.708	0.785	<b>0.769</b>	-	-	-	-	-	-	-
HM	0.676	0.75	0.808	<b>0.753</b>	-	-	-	-	-	-
HT	0.724	0.738	0.798	0.767	<b>0.771</b>	-	-	-	-	-
PE	0.69	0.773	0.725	0.694	0.715	<b>0.757</b>	-	-	-	-
PV	0.696	0.687	0.772	0.761	0.749	0.695	<b>0.775</b>	-	-	-
SI	0.685	0.783	0.805	0.784	0.76	0.735	0.761	<b>0.72</b>	-	-
TR	0.681	0.659	0.751	0.704	0.686	0.588	0.767	0.681	<b>0.77</b>	-
UB	0.768	0.674	0.698	0.691	0.713	0.672	0.703	0.728	0.663	<b>0.745</b>

**Source:** Effort Expectancy (EE), Facilitating Conditions (FCs), Performance Expectancy (PE), Trust (TR), Behavior Intention (BI), Use Behavior (UB), Hedonic Motivation (HM), Habit (HT), Perceived Value (PV), Social Influence (SI)

### Structural Model

PLS-SEM was employed to evaluate the consistency and accuracy of hypothesized variables. The provided data is related to a statistical analysis conducted on the relationship between various variables and the adoption of a Crypto-exchange application in the Cambodian market. The data includes the standard error, beta, t-value, hypotheses, p-value, and the result of the analysis conducted for ten hypotheses (H1-H9). This is illustrated by the following:

**Table 5** Summary of Structural Model Results

Hypotheses		Std. Error	Beta	t-value	P-value (2-sided)	Result
H1	PE -> BI	0.072	0.216	3.006	0.003	Accepted
H2	EE -> BI	0.072	0.065	0.908	0.364	Rejected
H3	SI -> BI	0.067	0.04	0.594	0.553	Rejected
H4	FCs -> BI	0.081	0.038	0.467	0.641	Rejected
H5	HM -> BI	0.069	0.018	0.259	0.796	Rejected
H6	PV -> BI	0.075	0.086	1.153	0.249	Rejected
H7a	HT -> BI	0.07	0.234	3.331	0.001	Accepted
H7b	HT -> UB	0.059	0.33	5.617	0	Accepted
H8	TR -> BI	0.066	0.217	3.309	0.001	Accepted
H9	BI -> UB	0.063	0.529	8.453	0	Accepted

**Source:** R2 for BI is 0.637 percent and R2 for UB is 0.642 percent.

A bootstrapping procedure was conducted with 999 bootstrap subsamples to evaluate the significant effect of variables. The R2 refers to the connection of the latent variable of BI and UB. The statistical results found that EE ( $\beta=0.065$ ,  $p=0.364$ ) and FCs ( $\beta=0.038$ ,  $p=0.641$ ), HM ( $\beta=0.069$ ,  $p=0.796$ ), PV ( $\beta=0.086$ ,  $p=0.249$ ), and SI ( $\beta=0.04$ ,  $p=0.553$ ) showed an insignificantly direct effect toward BI to use Crypto-exchange application. However, BI ( $\beta=0.529$ ,  $p=0.000$ ) and HT ( $\beta=0.33$ ,  $p=0.000$ ) had a considerable relationships toward UB and PE ( $\beta=0.216$ ,  $p=0.003$ ) with TR ( $\beta=0.217$ ,  $p=0.001$ ) were significantly direct effects on BI.

The extension of UTAUT2 of the two (2) variables HM ( $\beta=0.069$ ,  $p=0.796$ ), and PV ( $\beta=0.086$ ,  $p=0.249$ ) demonstrated negative relationships toward BI whereas HT had a significant positive influence and impact on both the Behavioral Intention and Use Behavior of Crypto-exchange adoption in Cambodia market.

### Results of the Structural Analysis

The structural analysis revealed that there was an insignificant effect of EE, FCs, HM, PV, and SI on the intention to adopt the Crypto-Exchange Application. In contrast, PE, TR, and BI had a positive impact on both BI and UB. Interestingly, HT had a very significant effect on the BI and UB of the Crypto-Exchange Application in the Cambodian market. Consequently, all the variables were accepted except EE, FCs, HM, PV, and SI.

The summary of research variables is as follows:-

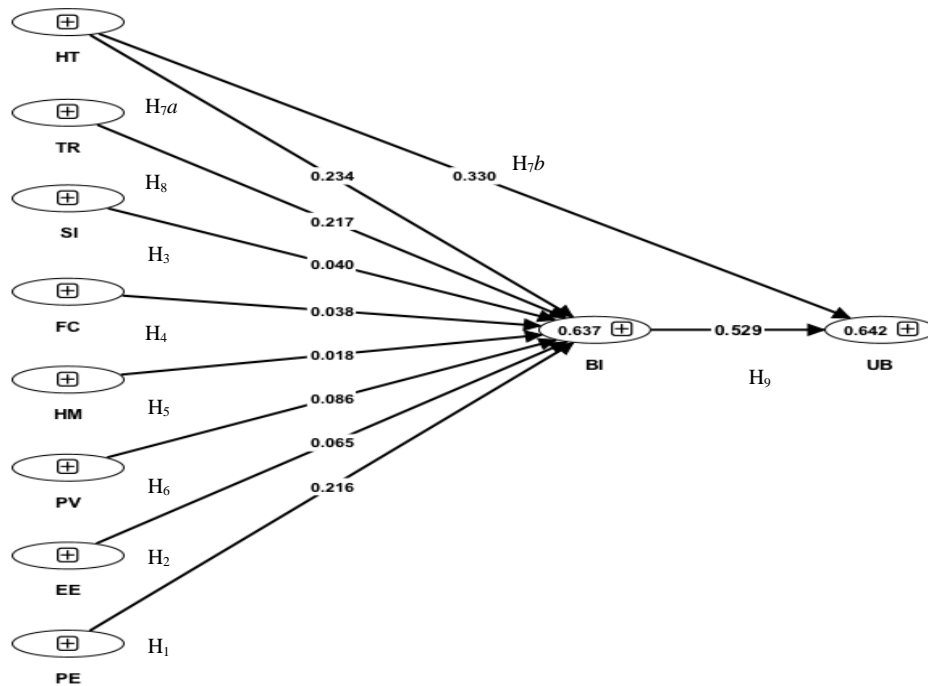


Figure 1 Graphical Representation of the Model. Author’s Compilation

## Discussion

The application of UTAUT2 to Crypto exchange application-based trading has revealed insightful results. In particular, Habit was highlighted as the strongest predictor of intention to use Crypto-Exchange applications for trading and investing, indicating the habitual nature of consumers’ usage of the application. Performance Expectancy (PE) was also a significant predictor, implying that users perceived benefits from the application and its functions. These findings are consistent with previous research (Venkatesh et al., 2012).

The results from this structural analysis illuminated the importance of Performance Expectancy (PE), Trust (TR), and Behavioral Intention (BI) in driving Behavioural Intent (BI) and User Behaviour (UB) toward the adoption of the Crypto-Exchange Application in the Cambodian market. The significance of PE and TR has been noted in prior studies, as both are believed to be critical to positive user experience and to the determination of user intent when making adoption decisions. It is clear that users find it important that the application is beneficial to use, and that they trust the application to operate in a secure and reliable manner. The results also uncovered the effects of Habit (HT), and while it may seem counterintuitive that habit could affect user intent and behavior toward a new technology, it is important to consider that in the case of the Crypto-Exchange Application, users may have existing habits or behaviors associated with the use of prior financial applications, and these habits can influence the adoption of the new application. This suggests that leveraging user habits may be beneficial for facilitating the adoption of the Crypto-Exchange Application. In contrast, the results showed an insignificant effect of Effort Expectancy (EE), Facilitating Condition (FCs), Hedonic Motivation (HM), Perceived Value (PV), and Social Influence (SI) on the user’s intent and behavior, suggesting that these features may not be as important in facilitating the adoption of the Crypto-Exchange Application. This can be attributed to the fact that most of the users may already be familiar with the basic features of the application, thus reducing the perceived importance of the aforementioned features.

Overall, the findings of the application of UTAUT2 to Crypto-Exchange applications for trading and investing in the Cambodian market revealed that Habit (HT) and Performance Expectancy (PE) significantly predicted user behavior and intention toward adoption, similar to findings in previous studies. Trust was also found to be an important factor. However, contrary to prior research, Effort Expectancy (EE), Facilitating Conditions (FC), Hedonic Motivation (HM), Perceived Value (PV), and Social Influence (SI) were found to be insignificant in influencing users' behavior and intention. This could be due to users' prior familiarity with the application's basic features.

### **Empirical Implication**

Perceived Value (PV) and Social Influence (SI) on user intent, can be deduced that the development priorities should aim to increase Performance Expectancy (PE) and Trust (TR) as these are the primary drivers of user intent and behavior. The empirical implication of this study is that Performance Expectancy (PE) and Trust (TR) are the primary drivers of user intention and behavior toward the adoption of Crypto-Exchange Applications. Furthermore, user habits can also impact user intent in adoption decisions, indicating the importance of leveraging existing habits to facilitate adoption. Additionally, the development priorities should be focused on increasing Performance Expectancy (PE) and Trust (TR) as these are the factors driving user intent and behavior. The results of this study provide important insights into the Crypto-Exchange application adoption process, indicating which factors contribute the most to user intentions and behavior. These findings can help organizations craft effective strategies for promoting and facilitating the adoption of the application and improving user experience.

In particular, it has highlighted the importance of Performance Expectancy (PE), Trust (TR), and Habit (HT) in driving user intent as well as the insignificant effects of Effort Expectancy (EE), Facilitating Condition (FCs), and Hedonic Motivation (HM), Perceived Value (PV) and Social Influence (SI). Going forwards, this suggests that organizations should emphasize the development of mechanisms to ensure user experience and trust for business Crypto-Exchange applications.

### **Research Limitation**

The research had several limitations which might have affected the findings. First, the researchers used a quantitative methodology which only allowed for a limited scope of investigation. The use of a qualitative approach might have revealed different results and perspectives on the factors likely to affect the intention to adopt the Crypto-Exchange Application. Second, the research primarily relied on self-reported data from Cambodian consumers which could have been biased or inaccurate. Lastly, the research did not consider possible external factors such as cultural or political influences as well as law and regulation that could have affected the results. These external factors could have affected the findings and should have been taken into account.

In conclusion, the research has revealed the effect of EE, FCs, HM, PV, and SI on the intention to adopt the Crypto-Exchange Application can be insignificant in the Cambodian market. In contrast, PE, TR, and BI have a positive effect while HT has a very significant effect on BI and UB. Despite the useful findings, there are some limitations that may impact the overall results of the research. Further research is needed to more accurately determine the effects of the variables.

## Recommendation for Future Research

The findings from this study provided a basis for further research in the Cryptocurrency exchange application field. For example, it would be beneficial to study the effect of variables like PE, TR, BI, and HT on the adoption of crypto-exchange applications in other markets, such as in the ASEAN region. It would also be important to look further into the effects of the rejected variables, particularly EE, FCs, HM, PV, and SI, that had no influence on the adoption in the Cambodian market. In addition, researchers can leverage an advanced regression model to examine the interactions among the factors that influence users' adoption of the Crypto-Exchange application. Moreover, future research can use primary data to study variables that were not included in this study, such as the level of financial sophistication of the users and their perception of the Crypto-exchange application.

Finally, given the dynamic nature of the Crypto-exchange application, longitudinal studies may be done over time to observe the evolution of the users' intention to adopt this technology over time.

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