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AN INVESTIGATION OF THE KEY DETERMINANTS OF INTENTION TO USE PAYMENT WITH CRYPTOCURRENCY: THE CASE OF RESTAURANT BUSINESSES

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ABSTRACT

With the developments in technology, it has started to be used as an additional payment method in businesses due to the emergence and increasing popularity of cryptocurrencies. This study was aimed to measure the factors that affect the customers' intention to use cryptocurrency technology as a payment method in restaurants, by examining the four dimensions of mindfulness and the positive valences and the negative valences of the valence theory. In this context, an online survey was applied to 405 cryptocurrency users to collect data. Confirmatory factor analysis (CFA) was used to verify the measurement model, and the structural equation model (SEM) was used to test the model. The findings of the study reveal that the participants think that the convenience of using this method has no effect on the intention to use it, that using this method is beneficial, not risky, and that they will not have any privacy concerns if they use this method. This study offers valuable practical implications for restaurant operators in the context of cryptocurrency payment systems. This study successfully extended valence theory by adding awareness to valence theory.

Keywords: Cryptocurrency, Blockchain Customer Intentions, Restaurant Business



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INTRODUCTION

Cryptocurrency is an excellent form of payment method since it is fast and reliable (Antonopoulos, 2010: 1). They offer the opportunity to make payments and transfer money 24/7 from anywhere in the world. The irreversible nature of the transactions can also prevent frauds arising from chargebacks, and thus, businesses can safely accept payments in cryptocurrencies (Yahanpath and Wilton, 2014). Due to the fact that cryptocurrencies receive lower transaction fees than other credit card processors, their usage is welcomed by retailers and there is an increase in their perceived popularity (Blau, 2017: 493). Cryptocurrencies like Blockchain and Bitcoin are innovative FinTech technologies that are rapidly expanding the financial market and changing the direction of the global economy. However, the acceptance rate of these technologies among consumers is currently low since there are still gaps that have not yet been taken into account and are misunderstood on many platforms (Albayati et al., 2020).

When the cryptocurrency usage statistics for 2022 is examined, it is seen that the number of users is more than 300 million all over the world and more than 18,000 companies accept payments with cryptocurrency (McGovern, 2022). Due to the increasing popularity of cryptocurrencies, some businesses have already started to use them as a payment method in addition to the existing payment systems. Valence theory has been accepted as a key theoretical approach in motivational psychology for many years. The most distinctive feature of this theoretical approach is the effort to relate the expected results of the action to the perceived advantages and disadvantages (Feather, 1988). Thus, this study proposes a model integrating the positive and negative valences of the valence theory and the mindfulness variable in order to identify the main determinants of the intention to use cryptocurrencies in the payment method in restaurant businesses. Mindfulness is a crucial evolving concept in society as the user's state of mind when a technology is introduced is a decisive factor in how the technology fits into the context of the task in the post-implementation phase. Therefore, this technology has a great impact on its subsequent acceptance and user adoption. The objectives of the research are to identify consumer intentions to adopt cryptocurrency payment services, to identify the role of valence theory and mindfulness in the adoption of cryptocurrency payment, and to provide implications for researchers and practitioners. The rationale behind this research arises from the fact that the existing literature on user acceptance and behavioural intention towards cryptocurrencies (e.g. Arias-Oliva et al., 2019; Ayedh et al., 2020; Ramachandra & Stella, 2022) has not been sufficient in dealing with the rational aspect of adoption decision making. In the first part of the study, the literature on cryptocurrency was examined and conceptual models and hypotheses were developed by considering the benefits, convenience, and perceived risk and privacy concerns arising from cryptocurrencies. In the second part, the methodology of the research, including scale development, data collection, and hypothesis validation was introduced. Then, SEM analysis was applied to verify the validity of the hypotheses. Finally, implications, limitations, and guidance for future research were provided.

Theoretical Background and Research Hypotheses

Mindfulness

Mindfulness has been explained as actively processing relevant and important information and paying attention to the information to create new knowledge about the situation (Frauman and Norman, 2004; Henderson, 1997; Moscardo, 2009). Mindfulness, broadly defined as a predicement of vigilance and deep consciousness (Langer, 1989b), can be a critical feature at the confirmation phase for deciding a technology that will be a good fit post adoption. In a conscious state, one is



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aware of the context and carefully weighs certain features of a technology against alternative ones. Mindful individuals also analyze their scenario more comprehensively and, thus, make more sophisticated preferences that better reflect the context (Fiol and O'Connor, 2003). Therefore, mindfulness can support people in taking more reasonable adoption preferences, which develop during adaptation to the role and technology, in the post-acceptance phase. Mindfulness has become an emergent concept in societies, and it is very important to know its advantages and disadvantages, its scope and limits (Sun et al., 2016). Mindfulness is subjective and related to human cognition, and therefore it shows very similar characteristics with the theory of planned behavior (Flavian, Guinaliu, & Lu, 2020).

In relation to technology acceptance, recent researchers (e.g. Roberts et al., 2007; Sun and Fang, 2010; Oredo and Njihia, 2015) have identified mindfulness, a psychological state of effective awareness, as a vital prerequisite, suggesting that it enables individual more open to new information and creates awareness of local conditions and alternative options, making it clearer why they should decide on a particular technology over alternatives.

Mindfulness has an impact on technology acceptance (Sun et al., 2016); in a context where technologies are changing at a very fast pace, whether users adopt them is affected by their judgements. Sun and Fang (2010) argued that new technology acceptance can be mindful or mindless. Specifically, mindfulness should help reduce uncertainty regarding the direct or indirect acceptance of technology, increase perceived usefulness, and directly support one's intention to use it (Sun and Fang, 2010). Therefore, we hypothesize that;

H1: There is a positive and significant relationship between mindfulness and the user's intention to use cryptocurrencies in the payment method.

Valence Theory

Valence forecasts the appeal or value associated with the goal-related outcome (Van et al., 1996). Valence theory was developed to understand consumer behavior, inspired by the literature of economics and psychology (Kim et al., 2009). According to this theory, consumers try to minimize the negative aspects of the product or service, maximize its positive aspects, and balance the services to reach a net valence. As consumer decision-making strategies, this model assumes that it operates in a manner similar to the rational man of economic theory, as the behavior is goal-directed, calculated, and based on some information about its costs and benefits (Peter and Tarpey, 1975).

Positive Valence

The positive valence dimension within the framework of valence theory measures the extent of benefit users can derive from online payment services (Yang et al., 2012). The utilitarian value and convenience dimensions, which contribute to the relative advantages of mobile payment within the framework of the positive valence dimension, were used in the study (Ozturk et al., 2017). Since paying with cryptocurrencies provides anytime and anywhere access to financial assets, just like mobile payment services, the advantage of mobile payment services is expected to have a positive impact on customers' intention to adopt technology (Lu et al., 2011).



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Utilitarian Value

Utilitarian value is defined as the degree of belief that a system will help to fulfill the task more easily, quickly, and with high quality, productivity and efficiency, and that using the system increases performance (López-Nicolás et al., 2008: 361). Unlike traditional currencies such as stocks and other assets that are only traded for five business days and unofficial holidays, cryptocurrencies allow 24/7 transactions that are highly reliable (Yahanpath and Wilton, 2014). The ultimate goal of cryptocurrencies with these qualities is to become a payment system that replaces, complements or competes with traditional payment systems (Nabilou, 2019: 39). An individual with financial knowledge is more inclined to use new technology. With the recognition of the new technology, the ease of use and the benefits obtained from the use directly affect the individual's decision. Support from the environment and trust associated with the use of technology can affect the intention to use digital payment methods (Gupta et al., 2020: 2). Understanding the innovation of paying with cryptocurrencies and being aware of alternative payment methods also increases utilitarian value. Because users may find this payment method more convenient and therefore more beneficial when they understand how it differs positively from other payment methods. Therefore, we hypothesize that;

H2: Mindfulness has a positive effect on the user's perceived benefit of paying with cryptocurrencies.

H3: Perceived benefit has a positive effect on the user's intention to pay with cryptocurrency.

Convenience

Convenience, control and efficiency are considered to be the main drivers for customers to carry out their financial transactions online (Jayawardhena and Foley, 2000). Perceived ease of use and perceived usefulness structures have been seen as important factors in determining the acceptance and use of information technologies by individuals in recent years (Yoon and Kim, 2007: 102). According to studies, it is seen that perceived ease of use and perceived usefulness are quite effective in determining people's acceptance and use of information technology (Jeung-Tai and Chihui, 2009).

Cryptocurrency offers many conveniences such as the ability of instant transfer everywhere, fast approval time, making fast payments with low transfer fees (Yahanpath and Wilton, 2014: 38; Marthinsen and Gordon, 2020: 8). For these reasons, the realization of global digital payments and money transfers through cryptocurrency networks bring many conveniences (Joo et al., 2019: 721; Zhong et al., 2021: 1). Cryptocurrencies allow users to collect balances in their digital wallets on a scale not possible with cash. The ability to carry large amounts of money makes it easy to spend it whenever one wants (Kahn and Rivadeneyra, 2020). According to the research, it is seen that the adoption of cryptocurrencies in the payment method is mainly affected by its practicality and convenience, as well as efficient transaction time, faster payment, and simplification of the payment process (Nuryyev et al., 2018: 309; Alqaryouti et al., 2020: 123; Titov et al., 2021: 1). In addition, in a state of mindfulness, a technology user becomes more aware of their needs and how technologies can be adapted to their needs. In this way, the user has the opportunity to evaluate the convenience of technology, and thus, mindfulness can support user-perceived convenience of paying through information systems (Flavian et al., 2020). Therefore, we hypothesize that:

H4: Mindfulness has a positive effect on the user- perceived convenience of paying with cryptocurrency.

H5: Convenience has a positive effect on the user's intention to pay with cryptocurrency.



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Negative Valence

Negative valences in the context of valence theory refer to the negatively perceived attitude associated with the behavior of adopting a new system. Negative perception refers to the extent to which the services involve uncertainty and risk when using payment services (Yang et al., 2012). Negative valences are expected to have a negative impact on the customer's intention to adopt the technology.

Perceived Risk

Perceived risk theory is another concept used to explain consumer behavior (Lin, 2008). The concept of perceived risk is defined as the potential for loss that may occur while pursuing the desired result of service use (Featherman and Pavlou, 2003: 454).

Since cryptocurrencies are still new, valid legal principles are insufficient and they are subject to only very limited financial regulations (Low and Tan, 2020: 171). These elements make cryptocurrencies risky assets (Anastasiou et al., 2021: 1) since they are highly susceptible to manipulation (Hamrick et al., 2021), and especially markets, where cryptocurrencies are exchanged, may face the risk of cyber attacks (Caporale et al., 2021). No country in the world has the power to stop cryptocurrency transactions, and the only possible way to end it is to put an end to the worldwide internet (Bziker, 2021: 3). Another important aspect of the research is that as the level of mindfulness of the user increases, the level of perceived risk that may arise due to the use of cryptocurrency also rises. So we hypothesize that:

H6: Mindfulness has a negative impact on the user's perceived risk of paying with cryptocurrencies.

H7: Perceived risk has a negative impact on the user's intention to use cryptocurrency as a payment method.

Privacy Concern

In parallel with the developments in the field of internet and technology, issues related to privacy and trust have become even more important. Confidentiality is defined as an individual's right to be left alone and to control the disclosure of their personal information (Liu et al., 2005). Privacy concern reflects the user's concerns about information privacy (Dinev and Hart, 2006). It is a known fact that privacy concerns directly affect users' behavioral intentions in various contexts, including commerce (Sheng, Nah, & Siau, 2008). For this reason, protecting consumer privacy has become a vital criteria for the growth of such systems (Bandara et al., 2019).

In many societies, individuals and organizations have a reasonable expectation of privacy in their economic activities. Cryptocurrencies have privacy but not anonymity. (Marthinsen and Gordon, 2020: 8). When examined, Blockchain technology is already a distributed ledger technology with features that can provide reliable security solutions (Li et al., 2021: 1). For this reason, payment or transfer with cryptocurrencies provides a high level of confidentiality for both the sender and the receiver (Yahanpath and Wilton, 2014: 38). As the level of awareness of the person increases, the intention to use technology more carefully and consciously also increases. However, there is a gap in the literature regarding what kind of impact mindfulness has on user's perceived privacy concern. Therefore, the impact of mindfulness on privacy concerns and the impact of privacy concern on the use of cryptocurrencies are matter of curiosity. Thus, we hypothesise that;



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H8: Mindfulness has a negative impact on the user's perceived privacy concern of paying with cryptocurrencies.

H9: Privacy concern has a negative impact on the user's intention to use cryptocurrencies as a payment method.

METHODOLOGY

A survey was created using Google Forms to collect research data. The scales used in the research were adapted from previous studies and made suitable for cryptocurrency. The model in Figure 1 was tested in the study.

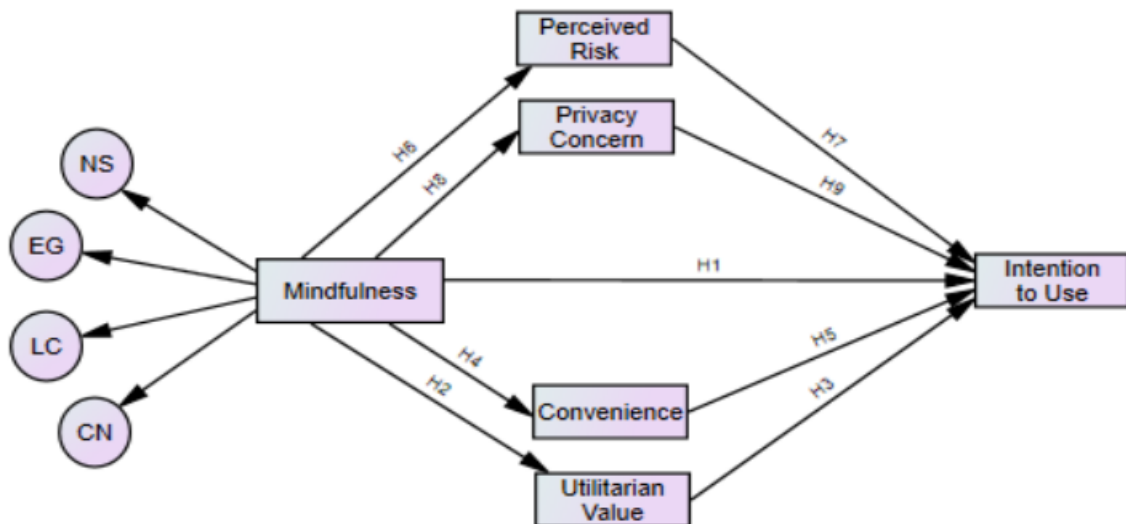


Figure 1. Research model

Perceived risk, privacy concern, convenience and utilitarian value dimensions were adapted from Ozturk et al. (2017). Mindfulness dimension was created by Sun et al. (2016) and adapted by Flavian et al. (2020). Finally, the questions constituting the dimension of intention to use were measured with the scale adapted from Bhattacharjee and Premkumar (2004). The sample of the research consists of people who own cryptocurrencies. In this context, 427 people were reached online through "Discord and Telegram" channels through cryptocurrency phenomenons during May and June 2021. All research constructs were measured using a five-point Likert-type scale consisting of "1 = I strongly disagree, 5 = I strongly agree". In order to ensure that those who know about cryptocurrency and cryptocurrency users participate in the research, screening questions were used and surveys were filled by their followers through cryptocurrency phenomenans. When the 22 missing answers and missing values were excluded from the data, the remaining 405 questionnaires were used for the analysis. As a result of the reliability and validity analyzes, it is seen that the Cronbach's Alpha value is ,897.



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According to Table II, which includes demographic information, 15.3% of the respondents stated that they had previously paid with cryptocurrency in restaurants. The majority of the participants were male (83.7), with the age of 26-35 years (37%), and had a bachelor's degree (50.6%).

Table 1. Demographic and user characteristics

Demographic and user characteristics	N	(%)
Gender		
Female	66	16.3
Male	339	83.7
Total	405	100
Age		
18-25	111	27.4
26-35	150	37
36-45	110	27.2
46-55	28	6.9
55 or older	6	1.5
Total	405	100
Education		
Below High School	11	2.7
High School	82	20.2
Associate's Degree	58	14.3
Bachelor's Degree	205	50.6
Postgraduate Degree	49	12.1
Total	405	100
Monthly Income		
3000tl or less	95	23.5
3001-4500tl	65	16
4500-6000tl	91	22.5
Over 6001tl	154	38
Total	405	100
How many years have you owned cryptocurrencies?		
1 year or less	270	66.7
1-2 years	70	17.3
2-3 years	29	7.2
Over 3 years	36	8.9
Total	405	100
Previous experience cryptocurrency payment in restaurants		



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Yes	62	15.3
No	343	84.7
Total	405	100

The data of the study were analyzed using confirmatory factor analysis (CFA) and structural equation modeling (SEM). CFA was used to evaluate the measurement model and SEM was used to test the research hypotheses.

Confirmatory Factor Analysis

CFA results showed that the measurement model was an acceptable one. The ratio of chi-square value to degrees of freedom was less than 3 ($X^2= 639.995$, $df= 341$). In addition, other fit indices were found to be satisfactory (RMSEA= 0.047, CFI=0.976, NFI= 0.949).

For the reliability analysis of the scales, composite reliability (CR) was calculated. As seen in Table 2, CR values were found to be between 0.928 and 0.973. These results demonstrated acceptable measurement reliability for our model. In addition, the average variance extracted (AVE) values are all above 0.50, indicating a high convergent validity. Finally, the square root of the AVE value of each construct was compared with the inter-construct correlations to assess the discriminant validity in Table 3. All square roots of AVE values revealed inter-construct correlations indicating an appropriate level of discriminant validity (Fornell and Larcker, 1981).

Table 2. Measurement model fit

Constructs	Standardized Loadings	Composite Reliability	AVE
Technological novelty seeking		0.963	0.89
I noted the differences between cryptocurrency payment and alternative payment methods I previously used.	0.881		
I identified how cryptocurrency payment is unique in relation to alternative payment methods.	0.918		
I was mindful about how cryptocurrency payment differed from alternative payment methods.	0.89		
Engagement with the technology		0.962	0.89
I engaged in the investigation of cryptocurrency payment when making the adoption decision.	0.883		
I explored cryptocurrency payment before I adopted it.	0.909		
I gathered factual information about cryptocurrency payment before making the adoption decision	0.884		
Awareness of local context		0.934	0.82



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When making the decision to adopt cryptocurrency payment. I thought about how it might help my purchase experience.	0.883		
When making the decision to adopt cryptocurrency payment. I thought about how it might change my purchase experience.	0.876		
When making the decision to adopt cryptocurrency payment. I thought about how it might be compatible with my purchase requirements.	0.861		
Cognizance of alternative technologies		0.928	0.76
I considered alternative views regarding cryptocurrency payment before making the adoption decision	0.84		
I was aware of alternative payment methods to cryptocurrency payment before deciding to adopt it.	0.854		
I considered equivalent alternative payment methods to meet my needs before deciding to adopt cryptocurrency payment.	0.852		
I considered alternative payment methods to meet my needs when deciding to adopt cryptocurrency payment.	0.833		
Perceived Risk		0.94	0.84
To probability that something will go wrong with the performance of cryptocurrency payment is high.	0.88		
Cryptocurrency payment might not perform well and create problems with my payment process in restaurants.	0.888		
Considering the expected level of service performance of cryptocurrency payment for me to sign up and use it would be risky	0.889		
Privacy Concern		0.943	0.84
The chances of using the cryptocurrency payment and losing control over my personal information privacy are high	0.877		
My signing up and using cryptocurrency payment would lead me to a loss privacy because my personal information would be used without my knowledge	0.891		
I think using cryptocurrency payment could not keep my personal sensitive information from exposure.	0.898		
Convenience		0.96	0.88
I believe cryptocurrency payment makes it easy for me to complete my payment process in restaurants.	0.893		
I believe cryptocurrency payment eliminates the time consuming payment processes (such as swiping a credit card and signing the credit card receipt etc.)	0.897		
I believe cryptocurrency payment provides convenience (in restaurants that accepts cryptocurrency payment) because it eliminates the need to carry credit card check or cash	0.893		
Utilitarian Value		0.967	0.88
I find cryptocurrency payment useful in the payment process	0.889		
Using cryptocurrency payment enables me to accomplish things that are important to me in the payment process	0.887		



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Using cryptocurrency payment helps me to complete my payment more quickly	0.856		
I can save time when I use cryptocurrency payment for my payment	0.869		
Intention to use		0.973	0.92
It is very likely that I will use cryptocurrency payment in the near future	0.859		
I intend to use cryptocurrency payment for my future purchases	0.869		
I plan to use cryptocurrency payment for my purchases	0.861		

Table 3. Discriminant validity matrix

	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
H1: Mindfulness -> Intention to Use	0.048	4.295	0.000
H2: Mindfulness -> Utilitarian Value	0.049	8.820	0.000
H3: Utilitarian Value -> Intention to Use	0.051	9.954	0.000
H4: Mindfulness -> Convenience	0.049	6.494	0.000
H5: Convenience -> Intention to Use	0.046	1.482	0.139
H6: Mindfulness -> Perceived Risk	0.054	4.540	0.000
H7: Perceived Risk -> Intention to Use	0.047	1.438	0.151
H8: Mindfulness -> Privacy Concern	0.061	1.838	0.067
H9: Privacy Concern -> Intention to Use	0.043	0.734	0.463



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Structural Equation Model

The same goodness-of-fit measures were used to assess the overall structural goodness of fit. The general fit indices Chi-square/degree of freedom for the research model was found to be 2.626 ($X^2=956.003$, $df=364$). When other fit indices are examined, it is seen that the values obtained are acceptable (RMSEA= 0.063, CFI= 0.952, NFI= 0.924).

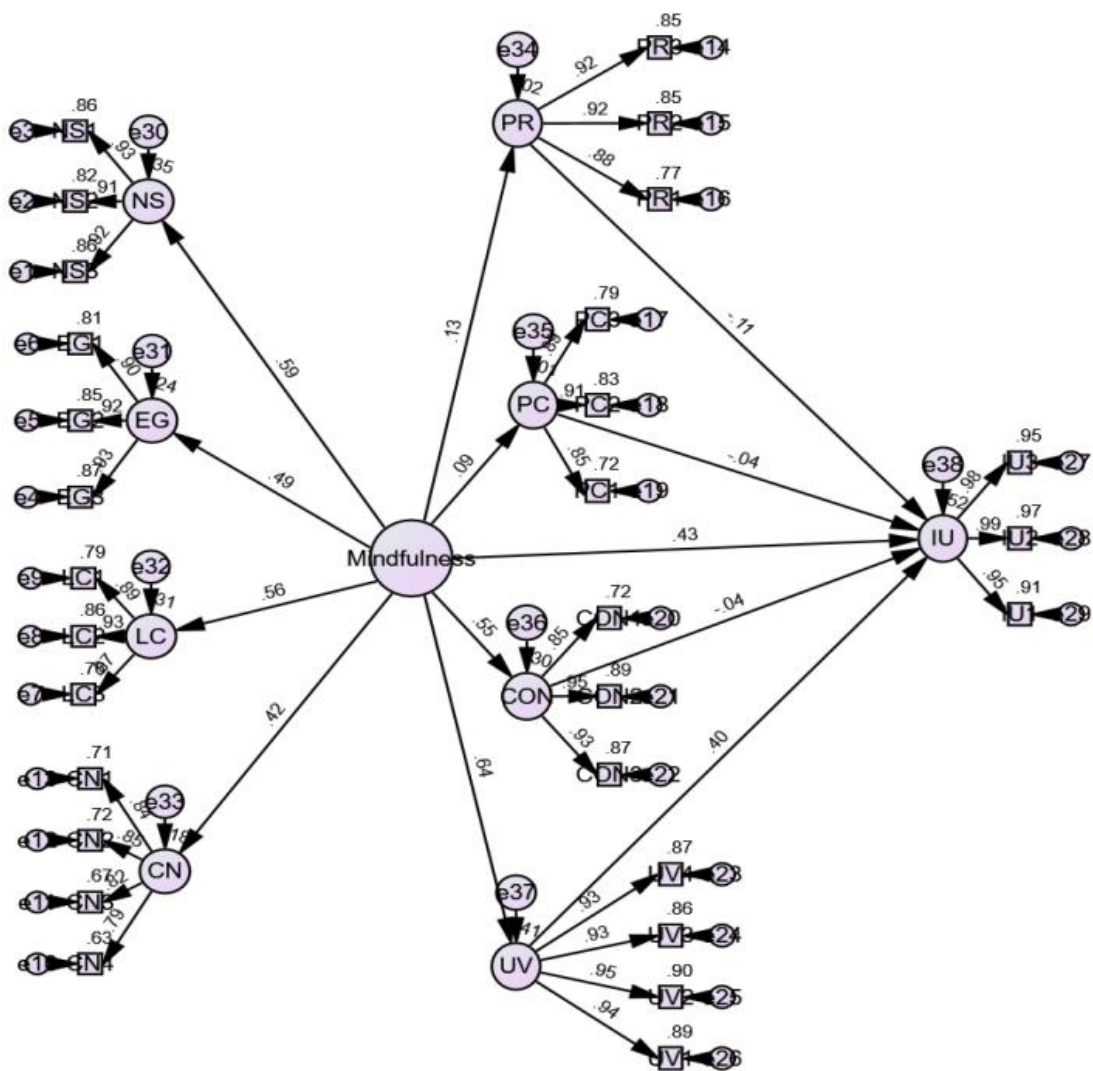


Figure 2. Structural equation model

The results of the analysis tests performed after determining the validity of the model are given in Table 4.



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Table 4. Validity of the Model

	F1	F2	F3	F4	F5	F6	F7	F8	F9
F1: Cognizance of alternative technologies	0.874								
F2: Convenience	0.172	0.942							
F3: Engagement with the technology	0.325	0.215	0.946						
F4: Intention to Use	0.151	0.337	0.192	0.960					
F5: Awareness of local contexts	0.318	0.179	0.516	0.336	0.909				
F6: Technological novelty seeking	0.153	0.290	0.198	0.483	0.229	0.947			
F7: Perceived Risk	0.328	0.085	0.225	-0.073	0.145	-0.020	0.917		
F8: Privacy Concern	0.133	0.166	0.089	-0.074	-0.008	0.086	0.466	0.920	
F9: Utilitarian Value	0.184	0.419	0.219	0.637	0.309	0.455	-0.094	-0.088	0.938

When the hypotheses of the research are examined, it has been found that convenience, perceived risk and privacy concern do not have an effect on the intention to use, and cryptocurrency mindfulness does not have a significant effect on privacy concern. Thus, while H5, H7, H8 and H9 hypotheses were rejected, other hypotheses were accepted.

DISCUSSION AND CONCLUSIONS

Mindfulness helps to reduce uncertainty about the adoption of a new technology, increase the perceived usefulness of it, and directly support one's intention to use it. It is seen that mindfulness can remove the uncertainty regarding the acceptance of a new technology and can significantly affect the formation of user beliefs about this innovative application and the intention to use it (Sun and Fang, 2010).

It is seen that the mindfulness dimension and utilitarian value are significantly effective in the adoption of the intention to use cryptocurrency as a payment method. Interestingly, it is seen that the risk factor, privacy concern and utilitarian value that may arise in the use of this method do not have a statistically significant effect on the intention to use this payment method. On perceived risk, Ozturk et al. (2017), Nuriyyev et al. (2018), Chin et al. (2020) and Ji-Xi et al. (2021) found similar results, and not all consumers may be affected in the same way by the perceived risk in the technology adoption process.

When the findings related to privacy concerns are examined, it is also seen that, contrary to other studies, security-related situations do not affect their intention to use cryptocurrency. Alaeddin and Altounjy (2018), Miraz et al. (2022), and Shahzad et al. (2018) concluded that the security factor significantly affects the intention to use cryptocurrencies. Similarly, considering the utilitarian value of cryptocurrencies, findings differ from other studies (Ji-Xi et al., 2021; Miraz et al., 2022;



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Tamphakdiphanit and Laokulrach, 2020; Yeong et al., 2022), and security factor does not significantly affect the intention to use cryptocurrencies.

When the mindfulness dimension is examined, it has been observed that mindfulness positively affects the intention to use cryptocurrency as a payment method, similar to other studies (Alaeddin and Altounjy, 2018; Shahzad et al., 2018). When the results are analyzed in terms of demographics, cryptocurrency trading is becoming more and more popular among investors of different gender and age groups. However, in previous studies similar to this research, it is also seen that the majority of the participants are young men (Hasso et al., 2019; Shahzad et al., 2018; Albayati et al., 2020). In this case, it can also be explained by the fact that young men are more likely to underestimate risks (Deery, 2000).

Theoretical Implications

Our research contributes to the current research in this area by providing a theory-based research model that can guide future research in cryptocurrency payments. The addition of positive and negative valences to the existing TAM model with the Mindfulness dimension opens up new research paradigms not only for researchers of cryptocurrency technology adoption, but also for those of technology adoption.

Practical Implications

The development of innovative financial technologies is vital for the growth of existing financial markets. Therefore, the attitudes and awareness of cryptocurrency users are very important to understand the behavioral intention to use cryptocurrency. The findings obtained from the study provide crucial implications for restaurant operators. In line with the findings of the research, it has been concluded that consumers will not have any privacy and security concerns if they are familiar with the blockchain system. In addition, they are willing to pay with cryptocurrency because they think that this system will be reliable and beneficial for them. If businesses add cryptocurrency option as a payment method, it is seen that consumers are willing to prefer this payment method.

From a business perspective, these results show that users need these kind of easy and innovative payment methods. Moreover, in terms of utilitarian value of this payment method, it is important for business owners to use this system, which is faster, more convenient and safer than traditional payment methods. It is also known that especially young people have a better understanding of technology and have a better awareness of technology, so they have more knowledge about cryptocurrencies (Ramachandran and Stella, 2022). It is thought that if business owners adopt cryptocurrency payment systems, they can better appeal to the younger audience.

Limitations and Future Research

This study has some limitations that may affect the findings. It is thought that the fact that it is primarily limited to the restaurant sector and the sampling is reached through cryptocurrency phenomenans may affect the results. Five different antecedents of the intention to use cryptocurrencies were used in the study. In addition to taking different sectors as a basis in future studies, it is thought that it will be useful to investigate consumer behavior intentions of cryptocurrency adoption from a wider perspective by adding individual differences variables, subjective norms, and usefulness in addition to these antecedents.



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