

CRYPTOCURRENCY GAMIFICATION: HAVING FUN OR MAKING MONEY

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Abstract

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The purpose of gamification in cryptocurrencies is to improve user engagement through game-thinking (Kabita, 2020; Rodrigues et al., 2019). Yet, it is unclear whether participants are motivated by the desire to have fun or to generate money. This study intends to explore the elements that encourage people to participate in cryptocurrency gamification by analysing perceived enjoyment, perceived profitability, and demographic variables. Data was obtained from Thai nationals residing in Thailand who have invested in digital assets or plan to in the future. Using multivariate logistic regression, statistically significant factors were identified. The data indicate that Thai investors' interest in cryptocurrency gamification increases with age and student status. Also, people are attracted to the gamification of cryptocurrencies since they may be both interesting and lucrative. The study argues that it is essential to assess the risks associated with the gamification of cryptocurrencies. This will ensure that individuals who wish to earn money do not lose it. In addition, the likelihood of financial exploitation through cryptocurrency gaming must be evaluated. This is required because the risk of individuals being victimised through scams increases as the number of persons who play these games grows.

Keywords: Cryptocurrency, Crypto Games, Digital Asset, Gamification

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1. INTRODUCTION

Technological advances are anticipated to enable businesses in the digital economy to shift to more digital modes of working, managing, organising, and supporting organisational transformation (Limna, 2023). In addition, with the advent of blockchains, there has been a paradigm shift from centralised to decentralised computing systems (Ferdous et al., 2019; Murray et al., 2023). In 2008, Satoshi Nakamoto introduced the Bitcoin protocol, ushering in a new digital era characterised by the global decentralisation of software systems, a topic of increasing academic interest (Swartz, 2018). After more than a decade after its introduction,

the technology has been incubated and therefore acquired popularity for its diverse range of applications, including financial, medical, pharmaceutical, and security goals, as well as its usage by government organisations (Jaoude & Saade, 2019). Innovative business concepts and start-ups, for instance, have adopted blockchains rapidly because of their independence from third parties (Tönnissen et al., 2020). This innovative technology will also have a profound effect on digital games, particularly those featuring enormous multi-player settings (Min & Cai, 2019).

A cryptocurrency is a digitized form of digital asset that is secured by cryptography, which refers to the art entailing the conversion of plain text into

codes using encryption technology (Smith & Kumar, 2018). With the traditional market moving online, Satoshi Nakamoto realized that there was a gap in online transactions that necessitated that payment systems also go online (Halaburda et al., 2022). Online buyers and sellers relied on financial institutions like banks to help close transactions. However, as Brunton (2020) noted, such transactions are not completely reliable, as there is a chance that they will produce errors that cannot be avoided, which leads to a rise in transaction fees to resolve these issues. The development of cryptocurrency introduced a peer-to-peer electronic payment system that would be exclusively between the two parties without the need for a third party (Berentsen, 2019). Cryptocurrency is a decentralized electronic payment system, meaning that it is not controlled by any authority, and is not subject to government control (Musiani et al., 2018). It also assists in avoiding hefty transaction fees or having third parties hold on to personal information, including customer balances, in addition to shortening the transaction period.

Despite their increasing popularity, cryptocurrencies have been seen as too complex for the general public and are mostly used in business-to-business transactions (in the case of trading, a business is represented by a sole entrepreneur) (Hossain, 2021). Conducting a transaction on the blockchain necessitates overcoming a number of technological obstacles; trading cryptocurrencies also necessitates a high degree of financial expertise. To address the issue that consumers do not grasp what a cryptocurrency is, why it is significant, or how the technology behind it works, certain cryptocurrencies have added gamification aspects that maximise blockchain's unique applicability (Serada, 2020a). For instance, CryptoKitties, the first widely recognised blockchain game, was created and developed to raise awareness about cryptocurrencies and blockchain technology and explain the fundamentals of blockchain use to the general public ("CryptoKitties: Collectible and breedable cats", n.d.). In the game, players may own, trade, and manufacture virtual cats represented by non-fungible tokens that adhere to the ERC-721 token standard. Cats' characteristics and transactions are recorded on the Ethereum blockchain. As of early December 2017, CryptoKitties transactions accounted for more than 10% of all Ethereum traffic ("CryptoKitties craze slows down", 2017).

Gamification has, in the recent past, become very popular with organisations and individuals online. Ideally, gamification entails adding game-like features to the Internet of Things, web and mobile apps, and enterprise information systems, which have caught the attention of companies, developers, and leaders (Parizi & Dehghantanha, 2018; Sitthipon et al., 2022; Srivastava et al., 2022). The underlying idea of gamification is to ensure that users are more engaged and motivated and that their performance is enhanced when participating in a given activity through the introduction of game-like features to ensure greater productivity. While the term "gamification" may be a relatively new one to many, the implementation of "game-thinking" is a concept that has been implemented in other areas including education, the military, supermarkets, and airlines.

Innovators have moved with speed to implement gaming design elements in non-gaming environments to increase user engagement and participation (Serada, 2020b). The underlying aim is to engage participants by providing rules or methods that will make their experience worthwhile. Gamification has become an increasingly important concept due to its ability to generate conceptual experiences that are similar to games (Rodrigues et al., 2019; Zagar et al., 2021).

The advent of gamification made it enjoyable and simple for the typical user to register accounts and wallets and construct an identity that would let them engage in the digital asset ecosystem (Yathiraju & Dash, 2023). Gamification has also been used for the purchasing, possessing, offering, and trading of virtual commodities gained by players through various online gaming activities, such as virtual weapons, lives, abilities, knowledge, and powers. These things are gained as prizes for activities such as conquering obstacles, beating foes, and accomplishing certain objectives (Benjamin, 2019). Despite the fact that the service policies of many games prohibit the exchange of these rewards for fiat currency, individuals continue to sell and purchase them in order to continue playing their games. Some players may be willing to spend a significant amount of money to obtain virtual items, such as guns and skills, which will assist them in advancing to the next level of gaming. These events have spawned a profitable underground industry that generates around \$15 billion a year (José Mataruna-dos-Santos & Wanick, 2019; Sestino, et al., 2022; Sitthipon et al., 2022). The opportunity to make money through the gamification of cryptocurrencies raises the concern of whether their fundamental motivation is to simply have fun or to generate income.

Although gamification of digital assets has become a popular trend, little study has been conducted to determine if the underlying motivation of users is to earn money or to have fun. This article is anticipated to expose the motives that encourage individuals to participate in the gamification of digital assets, which may contribute to the expansion of the digital economy in Thailand. The aims of this study are to investigate the elements that motivate people's participation in cryptocurrency gamification. Perceived enjoyment, perceived profitability and demographic characteristics comprise the motivational variables. The samples consist of Thai citizens residing in Thailand who have invested in digital assets or plan to do so in the future. Multivariate logistic regression was used to identify statistically significant variables. The results reveal that age and student status increase Thai investors' interest in cryptocurrency gamification. Additionally, people are interested in cryptocurrency gamification since it is both entertaining and potentially profitable.

The paper is divided into six sections to offer an overview of the research. Section 2 comprises a literature review. Section 3 explains the methodology of the research. Section 4 provides the study's findings, while Section 5 discusses them. Section 6 consists of a study conclusion, shortcomings, implications, and recommendations for further studies.

2. LITERATURE REVIEW

Engagement in cryptocurrency gamification is a dependent variable in this study. Hence, the term “gamification” needs to be defined. Gamification is a recent new field of research (Bargen et al., 2014), consisting of the development of game characteristics in non-game contexts (Rodrigues et al., 2019). One of the significant characteristics of gamification is “engaging users”. Gamification techniques in games involve attracting and then retaining players. Interaction with the players begins as soon as the user enters the game, such as introducing the game to the players and assigning tasks to them. Tasks engage players and provide them with a sense of fulfilment, while points and rewards help with satisfaction with the game. Similarly, gamification has been applied to various non-game contexts on various social media platforms in order to attract the greatest number of visitors (Kabita, 2020). It can be widely used, for instance, in the context of education (Hallifax et al., 2019) and businesses (Shi et al., 2017). A gamification design process may improve the software evolution process by researching the personalities of software professionals (Yilmaz et al., 2016). It has also been applied to the financial services industry. For example, DeFi (decentralized finance) is a new form of financial technology that leverages blockchain technology to enable users to access decentralised financial services such as lending, borrowing, trading, and payments. By integrating DeFi technologies into gamified e-wallets, users can access these services in a more engaging way while maintaining a secure environment for financial transactions (Gozman et al., 2018).

The genesis of the term “gamification” may be traced to the digital media business. The first publication to use the term “gamification” was published in 2008, but it wasn’t widely embraced in the scientific community until 2010 when several symposium organisers began to propagate this term (Deterding et al., 2011). Considering these two facts, the academy embraced this phrase. The first is the gradual acceptance and institutionalisation of social games, as well as the impact that game aspects have on our everyday interactions. The second is the introduction of desired experiences and users’ incentives to remain focused on the programme in use. In a more particular context, for a long time, online games were expressly created (only) for enjoyment, ignoring these fundamental problems. Hence, game design is a non-game environment modification that promotes products or services via the development of software applications that are more entertaining for customers, inspiring, enticing, and persuading them to use the so-called gamified website more frequently (Rodrigues et al., 2019).

In recent years, we have observed a significant increase in computer technology that influences users’ behavioural change, with common labels, such as persuasive technology (Jalowski et al., 2019) or positive computing, centred on engineering sciences and having a positive psychological and behavioural effect on users (Calvo & Peters, 2016; Yarosh & Schueller, 2017). Increasing empirical research on gamification, particularly concerning application uptake and user behaviour change, has spawned a boom of academic publications devoted to

disclosing these studies. This also encompassed the fields of software development, education, health, business, management, and marketing, prompting some scholars to examine how this new and pertinent research subject of “gamification” has been tackled in certain domains. Hamari et al. (2014) focused on gamification definitions and motivating incentives in their research. Morschheuser et al. (2016) investigated the use of gamification in crowdsourcing contexts, and in subsequent research, Morschheuser et al. (2017) explored the effects of gamification on various forms of crowdsourcing. Matallaoui et al. (2017) determined the gamification characteristics of exercise games. In a more comprehensive systematic review, gamification research was categorised according to the subjects of the studies (Kasurinen & Knutas, 2018). Recent studies by Majuri et al. (2018) demonstrate the usefulness of gamification in the majority of typical scenarios.

Perceived enjoyment, one of the independent variables in this study, has been described as the amount of pleasure experienced in a virtual world (Pelet et al., 2017). People play games partially so that they may have enjoyable experiences that remain with them. Within the realm of computers and video games, one of the most important reasons for playing a game comes from within oneself. This alludes to the pleasurable experience one gain from participating in a game (Klimmt & Hartmann, 2005). This study argues with the concept that crypto games shape a player’s hedonic experience by fostering a social environment conducive to numerous gaming activities and by providing them with the distinctiveness necessary to engage in the digital asset ecosystem. These attributes are gained as rewards for acts such as overcoming barriers, defeating enemies, and having the ability to do specific tasks via gameplay. If these core players have access to fresh gaming experiences, they may suffer reduced boredom as a consequence of repeated in-game behaviours, resulting in an increase in their perceived enjoyment of crypto games. However, Drummond and Sauer (2018) stated that video games are psychologically comparable to gambling owing to certain dynamics in video games, such as loot boxes or the gacha system, in which victors receive advantages at the expense of losers. This applies to randomizing in order to gain items, where losses may be avoided by not participating, and the virtual currency can be acquired for real money. In-game products can be purchased using this currency, which can also be bought with real money. In the case of crypto games, many games prohibit the exchange of these awards for fiat currency. Still, individuals sell and buy these rewards so that they may continue playing their games, and earn more rewards (Scholten et al., 2019). Studies that are pertinent to the setting of video games have indicated that continued gameplay is greatly influenced by perceived enjoyment. Perceived enjoyment was shown to have a significant impact on users’ desire to buy game items in Park and Lee’s (2011) study of the motivations behind people who spend money on in-game items. Additionally, a similar conclusion was reached in the assessment conducted by Lee et al. (2012), which discovered that behavioural intention to play virtual golf simulators was highly influenced by perceived enjoyment. Perceived game enjoyment fulfils

an intermediary role in the link between network interaction and attitude towards playing video games in terms of engaging in them with a big community, such as massively multiplayer online role-playing games (MMORPGs), according to the online game study by Hsiao and Chiou (2012). These facts might support the idea that how much fun a player has while playing a crypto game affects how long they continue to engage with it.

In this study, perceived profitability is an independent variable. To define this terminology, several types of research were reviewed, and the following is a summary: The expected return is a person's estimation of the benefits they anticipate receiving from an investment (Martin & Wagner, 2019). Money is among the most significant factors that may be used to explain the human impulse to invest. People may expect their investment's return while making the investment. Those who are more sensitive to returns give greater consideration to their investments (Sun et al., 2020). From the standpoint of the investor, a higher rate of return should result in more future revenue; therefore, the potential profit must be considered. Investment satisfaction is mostly determined by investment profitability (Hamad et al., 2021). According to Ayedh et al. (2021), profitability is one of the most important considerations when selecting cryptocurrency ventures. Investors would only invest money into items they thought would be profitable and had a good return potential. The investor's objective is to accomplish the task of achieving a high return on their investment. There are some pertinent works that explain how monetary profitability has a beneficial influence on the intention to invest. According to the findings of a study carried out by Fareva et al. (2021), the anticipation of a profit is one of the most important considerations in making an investment in stock. Norisnita and Indriati (2022) discovered that the primary motive to invest in cryptocurrencies is the potential financial gain that may be obtained.

3. RESEARCH METHODOLOGY

This research needed an acceptable instrument to obtain a significant quantity of information, and the survey approach was an advisable one. This allowed the researchers to obtain primary data. This method is helpful for setting up research instruments that are simple to convert to numerical data and can be analyzed using statistical software. As a result, a questionnaire was designed, the purpose of which was to determine demographic features and investing behaviour, as well as perceptions of crypto games. Furthermore, four online databases including EBSCOHost, Science Direct, IEEE Xplore, and Google Scholar were searched to identify research studies and articles that would be used to explore the thesis in this paper. The search terms used were "gamification in cryptocurrency" and "fun or/and money-making". The references of the identified articles were screened to establish their relevance for use in this study. A major requisite was their relevance to the topic in that they addressed the motives of crypto gamers, which would help to shed light on the subject. Works that exclusively examined gamification in other areas besides cryptocurrency

were excluded because they could not assist in answering the questions regarding the intentions of gamers.

This research study employed a quantitative design to identify and analyze the factors that influence people's motives for engaging in cryptocurrency, which in this study were to either have fun or make money. Quantitative research designs are helpful to use when researchers are interested in building an understanding of the link between various issues. In addition, the quantitative technique is the most appropriate method for accomplishing the research goal and also provides useful data from a significant number of participants.

3.1. Sample and population

The population comprises Thai citizens residing in Thailand who have invested in digital assets or have future plans to do so. Because the size of the population that was intended to be the focus of this research was uncertain, it was appropriate to use equations to compute it in this study. The researchers conducted a traditional survey with a 95% confidence level. According to Limna et al. (2022), a minimum of 385 cases with a p-value of 0.05 could be obtained through convenience sampling for the inferential statistics. Non-probability and convenience sampling were the methods used in the selection process. The selection of the samples was carried out through the dissemination of a questionnaire to online communities that were pertinent to cryptocurrency investment through a variety of social media channels in Thailand, such as Facebook groups. After employing convenience sampling, 385 participants responded to the survey. The data was collected between November 1, 2022, and December 31, 2022.

3.2. Research instrument

The primary tool utilized in this investigation for the purpose of data collection was a questionnaire. The questionnaire was divided into three sections and had a total of 19 questions. The survey started out with two screening questions that asked respondents whether or not they had invested in cryptocurrency and whether they were above the age of 18. The first part dealt with the variables' respective measurements. There were a total of three factors: perceived enjoyment, perceived profitability, and continuing desire to play cryptocurrency games. A Likert-type scale with five points was used for each of the questions. The questions on felt enjoyment and continuing desire to play cryptocurrency games were adapted from Hsiao and Chiou (2012), while the questions regarding perceived profitability were taken from Sun et al. (2020). All of the measurements have been checked, and the results show that the dependability of the assessments has been attained. Additionally, the investor information part, which was included in the second section, sought to collect information such as the total amount invested and previous experience investing. The final portion contained information about the individual, consisting of gender, age, income, education, and occupation.

3.3. Data analysis

IBM's Statistical Package for the Social Sciences (SPSS) version 27, which was used throughout this investigation, was responsible for the coding and analysis of the collected data. It was decided to employ this software to carry out data analysis, which would include both descriptive and inferential analyses, as well as a reliability test. When it came to the reliability test, Cronbach's alpha coefficient test was used to make sure that all of the variables that were examined had the same level of internal consistency. The approach to descriptive statistics involved summarizing the primary data that were acquired by the research instrument and transforming the data into helpful information. A multiple linear regression analysis was carried out in order to investigate the influence that a player's perceptions of their own enjoyment and profitability have on their motivation to continue playing a cryptocurrency game.

3.4. Alternative method

To gain a deeper understanding of this issue, one may do an in-depth interview or a focus group interview. This may show the reasons why important aspects increase investor involvement with cryptocurrency gamification. By conducting interviews with professionals in blockchain gamification or comparable sectors, one may acquire a comprehensive understanding of the involvement in cryptocurrency gamification.

4. RESULTS

To present a holistic picture of this analysis, it is vital to begin by describing the general characteristics of the participants. Table 1 shows the descriptive summary of personal information. In total, 385 people participated in the several independent samples examined for this particular study.

Table 1. Descriptive summary of personal information

<i>Personal information</i>	<i>Frequency</i>	<i>Per cent</i>
Gender		
Male	259	67.5
Female	114	29.5
Third-gender/nonbinary	4	1
Prefer not to say	8	2
Age		
18-25 years old	79	20.5
26-35 years old	225	58.5
36-45 years old	58	15
46-60 years old	23	6
Education level		
Below Bachelor's degree	8	2
Bachelor's degree	275	71.5
Master's degree or higher	102	26.5
Occupation		
Student	17	4.5
Private company employee	176	45.5
Public company employee	46	12
Self-employed	108	28
Others	38	10
Personal income		
Less than THB 15,000	27	7
THB 15,000-THB 20,000	106	27.5
THB 20,001-THB 40,000	129	33.5
THB 40,001-THB 60,000	65	17
More than THB 60,001	58	15
Investment experience		
Less than a year	127	33
1-3 years	104	27
4-6 years	60	15.5
6-10 years	56	14.5
More than 10 years	38	10
Investment amount		
Less than THB 10,000	157	40.5
THB 10,000-THB 50,000	144	37.5
THB 50,001-THB 100,000	38	10
THB 100,001-THB 200,000	31	8
More than THB 200,000	15	4
Total	385	100

As shown in Table 1, the findings indicate that male respondents made up the bulk of the sample, accounting for 67.5% of the total. The distribution of the participants' ages demonstrates that the majority of them were between 26 and 35 years old, with the average falling somewhere in that range. In addition, it reveals that 71.5% of respondents held a Bachelor's degree and that the majority of them were employees of private

companies (45.5%). In terms of their individual incomes, the results suggest that the majority of respondents had incomes between THB 15,000 and THB 20,000 (27.5%) and THB 20,001 and THB 40,000 (33.5%), respectively. In terms of their experience with investments, the majority of the participants had less than a year's worth of investing experience, which accounts for 33% of the total, and 40.5% of respondents had invested less than 10,000 baht.

Table 2. Reliability of measurement

<i>Variables' respective measurements</i>	<i>Cronbach's alpha</i>
Perceived enjoyment	0.816
Perceived profitability	0.814
Intention to play a cryptocurrency game	0.824

According to Table 2, Cronbach's alpha values are between 0.814 and 0.824 (over 0.7). The Cronbach's alpha values for perceived enjoyment and perceived profitability are 0.816 and 0.814, respectively. The Cronbach's alpha value for intention to play a cryptocurrency game is 0.824.

Table 3. The results of the multiple regression analysis

<i>Variables</i>	<i>Beta</i>	<i>t</i>	<i>p</i>
Constant	0.103	0.381	0.704
Gender (male)	0.160	3.089	0.002
Age	0.223	4.576	0.000
Education level	-0.006	-0.070	0.944
Occupation (student)	0.224	2.032	0.043
Occupation (employee)	0.024	0.278	0.782
Personal income	0.001	0.007	0.994
Investment experience	0.039	0.487	0.626
Investment amount	-0.057	-0.711	0.477
Perceived enjoyment	0.351	6.378	0.000
Perceived profitability	0.417	7.970	0.000

Note: $R = 0.777$, $Adjusted R^2 = 0.593$, $F(10,373) = 56.725$, $p = 0.000$.

This research investigated whether or not there was a correlation between participation in cryptocurrency gaming and the underlying motivations, which, according to the objectives, may be either to have fun or to gain money. Based on the findings of the investigation, there is a strong connection between the two categories of reasons and the gamification of cryptocurrencies. The results are $B = 0.351$, $p = 0.000$ for making money, and $B = 0.417$, $p = 0.000$ for having fun, as shown in Table 3. In addition, it shows demographic variables including gender (male), age, and occupation (student) positively influenced intention to play a cryptocurrency game, which implies that male who is older and students have higher intention to play a cryptocurrency game than young female and those who are self-employed. At a confidence range of 95%, the results of the regression analysis on the effects model indicate that both felt enjoyment and perceived profitability are positively associated with the desire to play a cryptocurrency game.

5. DISCUSSION

The main objective of this research is to establish the underlying motive for people's engagement in cryptocurrency gamification. Two main reasons why people engage in crypto games are to have fun, that is, for entertainment purposes, or to make money they can use for the supplication of their necessities. Participants in numerous studies reported that they are attracted to platforms that offer crypto games such as Sandbox, Axie Infinity, and Decentraland, among others because they can invest in the games and be in a position to purchase items that they need or desire, while others need to generate an income that they can use to provide for their family's needs.

On the other hand, others reported that they were driven to engage in crypto games for fun.

The majority of the people who decide to play these games for fun were in pursuit of sensory delight, thrill, suspense, control, achievement, and self-efficacy, among other aspects. While entertainment or having fun is obtained through investing and playing these games, companies that design games such as CryptoKitties have intentionally created them to generate these effects by providing a wide range of advanced visual and graphic designs, interesting adventures, and other similar features (Delfabbro et al., 2021). As mentioned, innovators have moved with speed to implement gaming design elements in non-gaming environments to promote user engagement and participation. The underlying idea is to engage participants by providing rules or methods that will make their experience worthwhile. Therefore, by providing a fun element in a non-gaming environment, they have been able to increase participation, which raises the demand for cryptocurrency.

The key finding reveals that Thai investors engage in cryptocurrency gamification because it is fun as well as possible profitability. Although the heterogeneity between the two motives is quite significant, the gap is not wide. These observations translate to the fact that although many people engage in cryptocurrency gamification exclusively to have fun, the gap in participation between them and those that do so to make money is notable. The motive for the participation in cryptocurrency gamification is also determined by demographic characteristics (Davidová et al., 2022). Geographical location is also a significant factor in influencing the motive for engagement, with the need to make money being more associated with elderly samples and those from Asia, Africa, and parts of Western regions (Almajali et al., 2022). These observations are in contrast with the majority of Western countries and European regions where the majority participates to have fun.

There are a number of factors that influence people to seek fun in crypto games. These include social pressure, in which people are influenced to do so by friends, families, and relatives (Lee et al., 2019). Based on participant responses in the sample studies used for this meta-analysis, the influence of family, friends, and relatives acts as the primary reason why a majority of people decide to engage and invest in this area (Fowler & Pirker, 2021). Those who influenced an individual to engage in crypto games were closely related to the investor. Second, people may opt to engage in these games as they learn about them on social media platforms and are persuaded to attempt to achieve the kind of fun, they perceive these games as providing. Social media platforms such as Twitter are used by people to share their thoughts and experiences which others can view and they can become interested in attaining a similar level of fun (Predescu et al., 2021). The social media space has been largely used by different participants including vloggers, YouTubers, and other social media influencers for information sharing and emancipation. Lastly, they may also be influenced to engage to fulfill their curiosity about what crypto games may entail (Jiang & Liu, 2021). Some people may be on a mission to have fun as they explore cryptocurrency games to grow their

knowledge in that area and to experience such trends.

A notable observation in cryptocurrency gamification regarding whether the participants engage for fun or money-making is that there is a cash flow. Gamification in crypto currency involves the acquisition of different virtual materials that can be used in these games, including weapons, abilities, powers, and knowledge, among other features, that have to be transacted between the buyers and the sellers. These operations create cash flows. As such, this feature means that cryptocurrency gamification is not a Ponzi scheme, as some people may speculate. Lastly, unlike in Ponzi schemes, the innovators in cryptocurrency gamification have decentralized the control of the game by using blockchain technologies such as Ethereum.

6. CONCLUSION

Although the concept of gamification is not new, it has proved to be highly effective and innovators have moved with speed to include game-thinking in non-gaming environments to increase participation. Cryptocurrency gamification is one such strategy that has been used to encourage participation and user engagement in cryptocurrency. Gamification in cryptocurrency has become a major gateway, not only for people with the motive of making money in cryptocurrency but because it has also opened windows of opportunities for gamers. Although various negative motives move people to engage in cryptocurrency gamification, this study has focused on the positive weighting between the need to have fun and make money. Age and student status were proven to improve Thai investors' enthusiasm for cryptocurrency gamification. Also, people are attracted to the gamification of cryptocurrencies since they may be both entertaining and profitable. This research has revealed that although the gap is not very wide, there is a notable difference that indicates that the underlying motive of user participation in cryptocurrency gamification is to have fun and make money.

The main objective of this study was to establish whether people are moved to engage in crypto games for fun or by the need to make money. We have pursued this objective by conducting a meta-analytic study to understand what primary research in this area has shown. As such, the first major contribution of this study is that it has

demystified the assumption that cryptocurrency gaming could be a Ponzi scheme, an idea which has previously hindered participation, as people are unaware of how cryptocurrency gaming operates. Therefore, this clarification is expected to prompt more engagement in cryptocurrency through crypto games. Second, this research has established that most people are motivated to engage in crypto games by their pursuit of fun. Although some do it to make money, the success of the fun aspect of crypto games is a step in the right direction, as more people are likely to participate in the future. For innovators, this acts as an incentive for them to engage in research and development as they attempt to come up with ways in which gamification can be more embedded in cryptocurrency and how they can introduce even more engaging aspects in games to keep participants more engaged. For people who intend to make money, this work provides valuable insight into a possible future rise in the demand for cryptocurrency, which would also mean that the prices of cryptocurrencies would be likely to increase and participants would be likely to make more money.

In light of the findings of this investigation, the following suggestions have been made. To either ensure that people who want to make money do not lose their money or that they have a holistic knowledge of the possible outcomes of investing in such areas, it is necessary to evaluate the risks that are involved in the gamification of cryptocurrencies. This will ensure that people who want to make money do not lose their money. In addition, there is a need to evaluate the possibility of financial exploitation via cryptocurrency gaming. This is necessary due to the fact that the risk of individuals being exploited through scams grows as the number of people who engage in these games increases. For the purpose of the subsequent research, there is a need for more inquiry that may be considered in the probable addiction to gaming with cryptocurrencies and to compare it to the more typical gaming platforms.

This study contains some limitations. The respondents were Thai people over 18 years of age, who lived in Thailand; thus, it is recommended to expand the investigation to cover more ground. The nature of this study was a closed-ended questionnaire. Consequently, qualitative studies, such as interviews or focus group discussions, could provide additional insights for future research.

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