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DETERMINANTS OF CRYPTOCURRENCY ADOPTION: EVIDENCE FROM AN EMERGING ECONOMY

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ABSTRACT

Purpose- Cryptocurrency adoption has tremendously improved in Sub-Saharan Africa's emerging economies. Despite this trend, less emphasis has been placed on determinants of cryptocurrency adoption in such economies. This study extended the Theory of Reasoned Action (TRA), Theory of Planned Behavior (TPB), and Technology Acceptance Model (TAM), to examine aspects that determine cryptocurrency adoption in Kenya. The study findings may assist policymakers in developing a sturdy regulatory framework for adopting digital assets and monitoring Virtual Asset Service Providers (VASPs).

Methodology- Data was collected through questionnaires from 400 students, graduates, and investors who had information about cryptocurrency. The study employed a structural equation model to estimate our latent constructs.

Findings- Results confirmed the hypotheses that perceived utility, perceived ease of usage, perceived risk, attitude, and subjective norms are significant constructs in determining behavioral intent to use cryptocurrency in Kenya. Further, the mediatory role of attitude on cryptocurrency adoption was also confirmed.

Conclusion- Policies that promote the introduction of an e-cash platform, regulation of digital system currencies, social mass awareness, and cryptocurrency companies with good reputations should be introduced by the government to ensure the development of the cryptocurrency market in Kenya.

Keywords: Cryptocurrency, perceived risk, perceived utility, perceived usability, subjective norm
JEL Codes: G15, O30, E32

1. INTRODUCTION

Cryptocurrency has experienced significant growth over the last decade, and this led to a record increase in digital assets in the world. Despite fluctuations in the value of cryptocurrency, the industry is still stable. This is demonstrated by the fact that in the first and second quarters of 2022 and 2023, big businesses and financial institutions were participating in the cryptocurrency market in addition to private investors. Africa is also steadily venturing into the crypto market with countries like Kenya, Nigeria, and South Africa being ranked among the world's ten largest Bitcoin markets (Ordu and Golubski, 2022). Chinalysis (2023) recorded a 1200 percent increase in cryptocurrency payments from 2020 to 2022 in Africa.

UNCTAD (2023) ranked Kenya as first in the world on peer-to-peer (P2P) volume of cryptocurrency transactions, on-chain cryptocurrency value received (analyzes all total crypto activities), and on-chain retail value transferred (captures the volume traded by individuals). It is estimated that 4.5 million people, which is 8.5 percent of Kenya's population owned and participated in the cryptocurrency market (Chainalysis, 2023). According to Local Bitcoins, a firm that facilitates P2P crypto trading with local currency, Kenya recorded Kshs.150 million which equates to almost $ 1.3 million in trading volume of cryptocurrency per week by the second quarter of 2022. This placed Kenya at the top of countries on Local Bitcoins by transaction volumes. Kenya's Bitcoin holding equates to 2.3% of the GDP which translates to more than $1.5 excluding other cryptocurrencies, such as Ethereum or Dogecoin (Chainalysis, 2023). According to these figures, it is apparent that the Kenyan society accepts cryptocurrencies even though the Central Bank of Kenya (CBK) has issued advisories against their use. Ndemo (2022) posits that blockchain technology is the future of Kenya because it has facilitated the financing of important sectors of the economy like the housing sector, Micro, Small and Medium-sized businesses (MSMEs), and remittance payments.

In 2020, Kenya witnessed an initial pilot testing of Akoin, a cryptocurrency project introduced by American musician Akon in Africa. The project achieved tremendous success in the Western County of Kakamega under the Mwale Medical and Technology City (MMTC), setting the platform for a national rollout. By 2025, it is anticipated that $2 billion worth of transactions would occur each month in MMTC. Kenya has also seen an increase in Sarafu, a community currency established in 2017 in the coastal region that has since transitioned into a cryptocurrency. The Sarafu network aimed to cushion the poor in Kenya during times of financial crisis by distributing income tokens that operate like vouchers, which can be used as a medium of exchange. The Kenya Red Cross Society partnered with the Danish Red Cross and Grassroots Economics who introduced the Sarafu network to issue blockchain-based Sarafu vouchers to Kenyans. This move was inspired by the success of the trial program in 2020 which saw a subscription of more than 40,000 households and business enterprises into the network during the COVID-19 outbreak (Mattsson et al., 2022).

However, despite the high cryptocurrency dealings, many African countries do not have a legal framework to regulate the crypto market. The Central Bank of Kenya in 2015 only advised discretion regarding cryptocurrency usage while not aggressively banning them. Nonetheless, CBK is required by Kenya's Money Remittance Regulations to oversee cryptocurrency transactions by granting licenses to allow money transmission entities to conduct business in Kenya. On 11th February 2022 CBK delivered a detailed discussion paper that evaluated the pertinence of Central Bank Digital Currency (CBDC) in Kenya's market and cross-border remittances. The CBK requested commentaries from Kenyans on the Discussion Paper and this was the beginning of discussions on the possible opportunities and dangers of implementing the CBDC in Kenya. Currently, there is no legal framework to regulate the cryptocurrency market. Therefore, this means that Kenyans can hold cryptocurrencies but cannot lawfully use exchanges to trade them for legal tender. The government in April 2024 appointed a technical committee to develop a regulatory and monitoring framework for the adoption of cryptocurrency also known as Virtual Assets (VAs) and Virtual Asset Service Providers (VASPs) which will regulate other digital money services in Kenya.

Many studies have been steered toward cryptocurrency as a new venture opportunity (Lone and Naaz, 2021; Sagheer et al., 2022; Shahzad et al., 2024). In Kenya, the cryptocurrency market has shown it has the potential to grow the economy due to its proficiency, fast, safety, collaboration, and worldwide opportunities. This research advances policy in addition to knowledge in three areas. First, the government of Kenya is in the process of designing a regulatory and monitoring framework for the adoption of Virtual Assets and Virtual Asset Service Providers. Thus, it is crucial for policymakers to determine what inspires Kenyans to utilize cryptocurrencies. This helps in coming up with regulations that would not discourage the uptake of cryptocurrency and also ensure financial system soundness. Kenya, like other African emerging economies, has been grey-listed and is currently struggling to improve its financial system standing before the Financial Action Task Force (FAFT). Second, Policymakers need to understand what determines cryptocurrency adoption due to the rising uncertainties of increased dealings of virtual assets that could surge the risks of financing terrorism and money laundering. Third, considering the extreme swings in inflation rates and monetary policy ineffectiveness in Kenya, cryptocurrency could offer protection against inflation due to its caping policy and its trustworthiness in the electronic marketplace (Sudzina et al. 2023). The usage of cryptocurrency in Kenya has an important role in its future value and use.

Specifically, this study analyzes the direct and indirect association between technology awareness and acceptability by users of cryptocurrency through observable factors such as; usability, usefulness, and risks associated with cryptocurrency adoption. Furthermore, we examine the encouraging and impeding features on the use of electronic currency by the Kenyan population. The adoption of blockchain technology is still at its infant stage in emerging economies like Kenya. This empirical study provides insights on the advancements made in blockchain technology as a means of exchange in developing nations like Kenya. First, we augment a body of existing literature linked to technology awareness. We also examine the variables that affect Kenyan consumers' acceptance of bitcoin use in order to assess their capacity to adopt blockchain technology. This will provide valuable insights and references to interested parties including the public, government, and investors. Second, our findings will assist the regulatory authority in coming up with a policy framework that will guide the monetary system on how to accommodate the cryptocurrency market. Third, we examine the potential ability of Kenya to adopt and use digital money for commerce and business ventures in the future due to the changing nature of technology. Finally, we examine cryptocurrency in terms of a link between man, finance, and technology using existing models. This fills the knowledge gap since majority of studies on cryptocurrency adoption center on the technological viewpoint. In this study, the Technology Acceptance Model (TAM), the Theory of Planned Behavior (TPB), and the Theory of Reasoned Action (TRA) are experimentally tested together with other constructs drawn from pertinent technology adoption models that are unique to Kenya.

This study is organized as follows: interrogation of previous existing studies concerning our topic is exhausted in the second chapter. Consequently, section three and four introduces and applies the research technique utilized in the study and the estimation approach. The concluding section discusses the findings of our regression results and policy commendations to the regulatory authority in Kenya.

2. LITERATURE REVIEW

Many existing theories assess the determinants of cryptocurrency adoption in the world. The pioneering works of Rogers Everett which commenced in the 1960s examined the Diffusion of Innovation Theory (DIT). This theory elucidates how innovation is spread among members of society over time through particular channels (Rogers, 1976). Consequently, the Reasonable Action hypothesis (Ajzen and Fishbein, 1977), Task Technology Fit theory (Goodhue and Thompson, 1995), and Technological Willingness theory (Parasuraman and Colby, 2001), evaluated individuals' attitudes and norms, their actual utilization of technology, willingness to embrace innovations and utilize them in their daily professional activities. Hu et al. (1999) introduced the Technological acceptance model (TAM) which linked perceived usability, technology anxiety, and efficacy to the perceived ease of utilizing a given technology. In this theory, a complete set of determinants was introduced which examined specific differences, social impact, system features, and moderating conditions. The Planned Behavior hypothesis (TPB) introduced by Ajzen (1991) has also been employed in research that predict social behavior of human beings. This theory holds that perceptions of behavior, attitudes, and subjective norms all influence group behavior, which is proxied by behavioral intent to use (BIU). The reasoned action hypothesis (TRA) introduced by Ajzen and Fishbein (1977) demonstrates how individuals behave when influenced by others. Ajzen (2011) concluded that attitude and subjective norms linearly affect the behavior intention of an individual. Ajzen and Fishbein (1977) indicate that subjective norm looks at what individuals perceive regarding peer pressure towards adopting or not adopting a certain behavior, while attitude is a person's valuation of implementing the behavior in question. Therefore, higher attitudes and subjective norms influence an individual's real behavior. TRA studies are popular among researchers because it is simple, easily interpreted, and can combine various constructs, especially those that influence an individual's conduct in a linear and successive pattern (Boxer and Thompson, 2020). In order to understand how consumers accept technology, Venkatesh et al. (2003) advanced the Unified Theory of Acceptance and Use of Technology (UTAUT), which looked at expectations for effort, performance, and societal impact in addition to enabling conditions. They further expounded on this theory by changing some original prevailing linkages and introducing new associations borrowed from the general principles introduced by Johns (2006) on the development of a hypothesis by bringing in new concepts.

Existing research has shown the necessity of integrating TAM, TPB, and TRA in order to have a more profound comprehension of the elements impacting the acceptance of novel technologies (Fu et al., 2006). Therefore, in our suggested research we combine TAMs (perceived utility, perceived simplicity of use, observed risk) and TPBs (attitude, subjective norm, supporting conditions). The use of cryptocurrencies is the focus of the hidden construct of supporting conditions because end-users must possess the technology and expertise required to enable their use of cryptocurrencies. This inspires confidence while making a given technology (digital money) easier to adopt.

2.1. Hypothesis Development

2.1.1. Intervening Role of Perceived Usefulness

This is one of the variables that influences intentional behavior by users to accept or reject innovation. Perceived utility (PEUS) is the notch to which a buyer of digital knowledge believes it contributes to his efficiency at work (Davis and Davis, 1989). PEUS considerably forecasts planned behavior to utilize cryptocurrencies. Shahzad et al. (2024) examined the role of trust as a cornerstone while featuring perceived usefulness as a mediatory construct. The research discovered that perceived utility had an impact on cryptocurrencies. In the same vein, Recksco et al. (2024) extended the UTAUT theory by examining the determinants of users' adoption of cryptocurrencies in Central Europe. The study concludes, that PEUS is significant in influencing the use of cryptocurrencies in Central Europe countries. Therefore, it is reasonable to conclude that PEUS facilitates the desire to utilize cryptocurrency (Sagheer et al., 2022, El-Chaarani et al., 2023). We hypothesize that PEUS motivates consumer behavior and intent to use cryptocurrencies (BIUC). Jariyapan et al. (2022) conclude that if people believe that adopting a novel technology will boost their aptitudes and skills, then their desire to accept an innovative technology will rise. PEUS is, therefore, a significant factor that influences the plan to employ cryptocurrency as a means of payment (Mailizar and Johar, 2021). In their study, Schaupp and Festa (2018) employed the Planned Behavior Hypothesis (TPB) to explore the variables that impact cryptocurrency adoption. They found out that perceived usefulness is important as a moderator between technological know-how and users' behavioral intent to adopt a given innovation. Previous studies have therefore emphasized how crucial perceived utility is in influencing a consumer's decision to adopt new technologies. (see Khan et al., 2020; Kher et al., 2021; Sagheer et al., 2022). Our hypothesis is that customers' inclination to utilize cryptocurrencies as a medium of exchange is positively impacted by perceived usefulness.

2.1.2. Intervening Role of Perceived Ease of Use

This variable looks at how straightfoward or intricate people think it is to employ technology in their lives. Sudzina et al. (2023) confirm that as it becomes easy to use technology, individuals will be persuaded to incorporate it into their businesses. This argument

has been widely researched, and it supports the Technological Acceptance Model. Shahzad et al. (2024) studied the mediatory role of perceived simplicity of usability in determining the usage of cryptocurrency in Pakistan. The investigation discovered that perceived simplicity of use was a vital mediator in cryptocurrency use. Further, consistent with this finding is that of Shahzad et al. (2022) which confirmed that factors such as computer self-efficiency, playfulness, reduced anxiety, and external control affect people's beliefs on perceived ease of usefulness. Further, Almuraqab (2020) concludes that experience and familiarity with computers will improve self-efficiency and reduce unease about adopting new technologies. In their study on determinants of e-government uptake in Togo, Chen and Aklikokou (2019) confirmed that perceived simplicity of use is vital in behavioral purpose to utilize e-government services. Consistent with this finding is that of Maruf et al. (2021) who scrutinized the role of conceived danger, perceived utility, and conceived simplicity of use in determining the intent to adopt ride-sharing services. The authors conclude that observed ease of utilization and conceived usefulness are vital in the adoption of ride-sharing services in China. Consequently, Nadeem et al. (2021) investigated factors that affect virtual assets adoption in China using TAM. The findings conclude that conceived simplicity of usage and conceived usefulness are key in cryptocurrency adoption in China. Jariyapan et al. (2022) Using TAM 3, investigate the variables that contributed to the acceptance of cryptocurrencies in developing nations during the COVID-19 era. They discover that perceived usefulness played a mediatory role on subjective norms and believed ease of usefulness resulting in crypto adoption in Pakistan. Consistent with these findings is that of Sagheer et al. (2022). Our hypothesis thus concludes that perceived ease of usefulness has a beneficial bearing on behavioral intent to adopt cryptocurrency usage.

2.1.3. Perceived Ease of Use and Perceived Usefulness

When it comes to technology, users will adopt a simple innovation more comfortably than those they find unnerving even if they think it's easy to utilize. Individuals will utilize technology that they believe is easy to utilize and requires less effort (Wilson et al., 2021; Shahzad et al., 2024). Chen and Aklikokou, (2019) conclude that PEOU positively affects PEUS of electronic government services in Togo. Along the same line, Sagheer et al. (2022) examine determinants of cryptocurrency use in Pakistan by the Z generation using TAM. The authors found out that besides the state's moderating function, observed ease of usage significantly affects perceived utility which in turn impacts the behavioral intent to utilize cryptocurrency. Consequently, Jariyapan et al., (2022) confirm that during COVID-19, emerging economies utilized digital money mainly because of their perceived simplicity of use and conceived utility. This research therefore acclaims that perceived ease of use is significantly affects conceived usefulness of cryptocurrency.

2.1.4. Intervening Role of Perceived Risks

Illia et al. (2023) investigated what influences the adoption of cryptocurrency exchange using a multi-theory approach. Apart from psychological innovation resistance, technological resistance, and functional and innovation resistance, the authors confirmed that perceived risks, subjective norms, and critical mass users also significantly affect the usage of cryptocurrency. Wilson et al. (2021), Jariyapan et al. (2022), and Sagheer et al. (2022) also emphasize the significance of seeming risk in determining cryptocurrency adoption. Al-Fagih (2016) in his research on variables that indicate non-shoppers' inclination to embrace online shopping, described perceived risk (PERI) as customers' understanding of the extent of probable risks of purchasing and utilizing an invention. Consumers will consider the risks before they purchase a given product (Muttaqin et al., 2023) or adopt a certain technology (Mweetwa and Mwange, 2024). Utilizing an extended UTAUT model, modulated by factors related to cultural variables, Khan et al. (2020) analyze the constructs influencing the implementation of online banking in emerging Asian economies. The study concludes that perceived security is a key variable that influences behavioral intent to utilize virtual assets. Consistent with this finding is that of Almajali et al. (2022) who analyzed the determinants of electronic currency adoption in Jordan. The findings demonstrated a noteworthy association between perceived danger, perceived ease of usage, perceived utility, perceived satisfaction, and trust in the intent to utilize cryptocurrency. Further, Shaikh et al. (2018) confirmed that whereas the unswerving effect of perceived danger on behavioral intent to adopt mobile banking is frail, it is imperative in the pre-adoption stage, which later influences other constructs that determine intention to use. However, Mendoza-Tello et al. (2019) discovered no discernible effect of perceived danger on behavioral intent to adopt cryptocurrency for e-commerce. Further, Farah et al. (2018) determined that observed risk has no influence on mobile banking adoption in Pakistan. Consistent with these findings is that of Jariyapan et al. (2022) who analyzed the determinants of cryptocurrency adoption in emerging economies using TAM 3. The study confirmed that perceived risk has little impact on behavioral intent to use cryptocurrency (see also, Ter Ji-Xi et al, 2021; Widyanto et al., 2021). Considering that cryptocurrency is an invented financial technology that has probable risks, our hypothesis posits that conceived risk has a detrimental influence on behavioral intent to utilize cryptocurrency.

2.1.5. Intervening Role of Subjective Norm

Ajzen (2011) defines subjective norm (SUNO) as a behavior that is approved by a person or a particular group of people. It determines how a person behaves due to the perceived social pressure from other people's perceptions. Sagheer et al. (2022) conclude that

subjective behavior has a notable incentive on conceived utility and behavioral intent to utilize cryptocurrencies. In line with these conclusions are those of Illia (2023). Johnston et al. (2024) found out that an individual will be biased towards utilizing a given technology if he believes that his social groups (family, friends, etc.) would also be inclined to use it. SUNO plays a major role in cryptocurrency acceptance. In their study of determinants of electronic currency use, Al-Amri et al. (2019) also verified that the way other people use cryptocurrencies affects their uptake. Furthermore, in his study of Bitcoin acceptance in the USA during the COVID-19 pandemic,) Kim, (2021) determined that SUNO contributes significantly to the behavior intention of adopting Bitcoin use. Consistent with these findings, Gazali (2019) in their study of Bitcoin investment behavior concluded that SUNO is a valid and reliable construct that determines cryptocurrency adoption. Therefore, the hypothesis to be used in this study proposed that intent to adopt cryptocurrencies in Kenya is significantly impacted by subjective norm.

2.1.6. Intervening Role of Facilitating Conditions

Hussain et al. (2023) explored the variables that impact the uptake of cryptocurrency using smart least square estimation on 342 respondents in Pakistan. The study confirmed that facilitating conditions (FACO), effort anticipation, social effect, and performance expectation play an essentiall role in establishing the behavioral intent to adopt a certain technology. FACO has also been employed in different studies including online banking (Khan et al, 2017), information technology adoption (Angorani, 2024), and social media (Al-Qaysi et al., 2020). For example, in their research, Khan et al (2017) found a statistically meaningful effect of enabling conditions on online banking. Studies that examine the effect of supporting conditions on cryptocurrency adoption have mixed outcomes. Venkatesh et al. (2003) determined that a substantial and favorable correlation exists between FACO and uptake of cryptocurrency. The same conclusion was recently verified by Arias-Oliva et al. (2019) in Spain. On the contrary, Almajali et al. (2022) in their study of factors that influence cryptocurrency adoption in Jordan found that facilitating conditions are irrelevant in deciding the acceptance of cryptocurrencies. After examining these studies, we hypothesize a major meaningful association between facilitating conditions and intent to utilize electronic currency in Kenya.

2.1.7. Intervening Role of Attitude

Vetrichelvi and Priya (2022) defined attitude (ATTI) as a secondary variable that facilitates the adoption of technology. Arpaci and Bahari (2023) and Idrees et al. (2024) reiterated the importance of attitude and awareness levels towards the adoption of new technologies. Doblas (2019) examined how awareness and attitude affect behavioral intention of cryptocurrency usage among university students in the Philippines. Results confirmed that attitude significantly affects the adoption of cryptocurrency. Furthermore, Fettahoglu and Sayan (2021) conclude that the attitude of individuals about using cryptocurrency influences their adoption in Turkey. Consistent with these outcomes is that of Almajali et al. (2022) who found that attitude had an intervening impact on the association between observed risk, perceived utility, subjective norm, perceived enjoyment, and behavioral purpose to adopt cryptocurrency use. Nonetheless, Vetrichelvi and Priya (2022) confirmed that the interceding role of attitude toward behavioral intent to use cryptocurrency was only partial. Al-Bashayreh et al. (2022) found that attitudes toward using mobile banking acted as an arbitrator in the relationship between people's desire to use mobile banking and their perception of risk. Taking into account the outcomes of past studies, we hypothesize that: attitude plays an intervening role amid observed risk and behavioral intent to use cryptocurrency, attitude will facilitate the link between conceived usefulness and intent to adopt cryptocurrency usage, attitude will also arbitrate the association between perceived usability and intent to utilize cryptocurrency as a mode of payment.

Based on the existing empirical studies that show the growing need to understand and regulate cryptocurrency use in the world (see, Fettahoglu and Sayan, 2021; Vetrichelvi and Priya, 2022; Bashayreh et al., 2022; Arpaci and Bahari, 2023; Sagheer et al., 2023; Jaripayan et al., 2023; Illia et al., 2023; Angorani, 2024; Shahzad et al., 2024; Johnston et al., 2024), there is scant knowledge on determinants of cryptocurrency adoption in Africa's emerging economies, especially Kenya. Furthermore, many emerging economies in Africa have not established the determinants of cryptocurrency use in their jurisdictions. Therefore, to come up with a regulatory framework and policies that regulate Virtual Assets and Virtual Assets Service providers is more of a challenge than an opportunity. There are also scant existing studies that try to combine the different models that explain behavior intent to use electronic money in the world. This research attempts to close this knowledge gap by adopting a unique research model that combines constructs from the attitudinal TRA model (attitude, and subjective norm) and TAM (behavioral intent to utilize technology, perceived ease of usage, perceived utility, and perceived risk) to examine determinants of cryptocurrency adoption in Kenya. We also factor in facilitating conditions that possess an effect on behavioral intent to utilize a new system in different settings.

3. RESEARCH METHODOLOGY

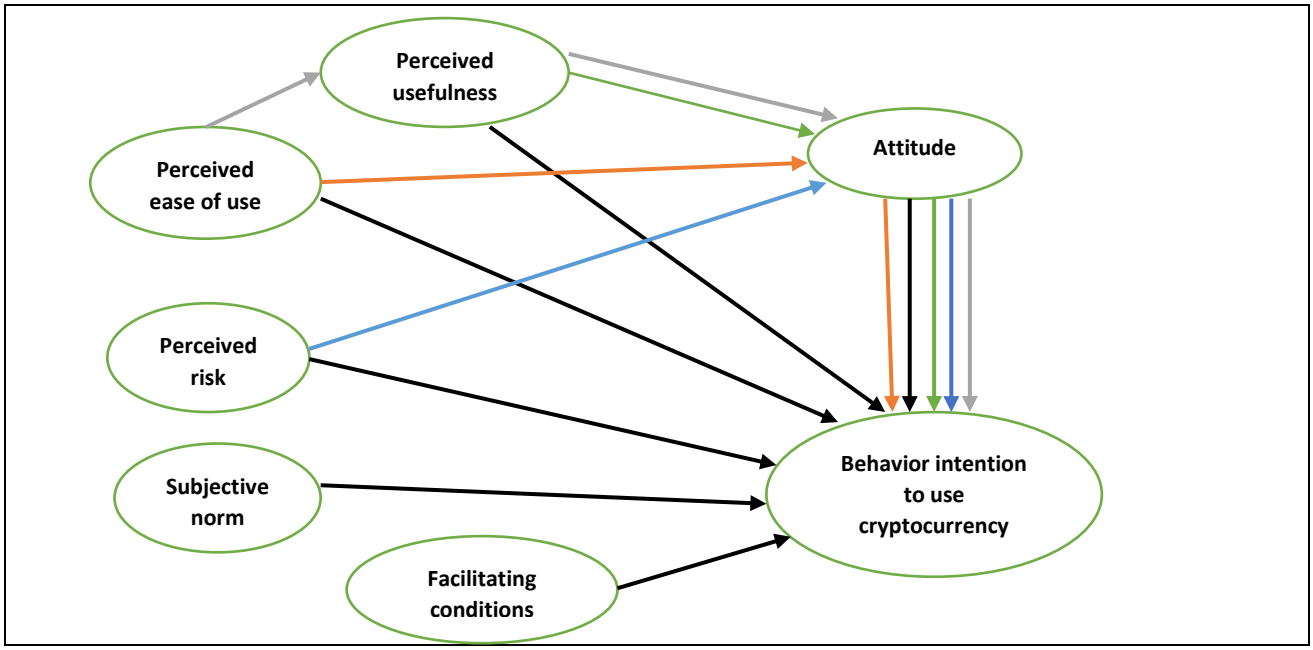
The study utilized the Structural Equation Model (SEM) to determine the association between our constructs of interest which are qualitative in nature. The currently available empirical publications on this topic supports the selection of this estimation approach

(see, Jariyapan et al., 2022; Vetrichelvi and Priya, 2022; Al-Bashayreh et al., 2022). We estimate a multivariate model that incorporates measurement items to proxy latent constructs. The estimated constructs in this research were modified from earlier empirical works. Preceding theories, models, and hypotheses were also tested. A structured cross-sectional questionnaire was utilized to gather data on our variables of interest through the Internet. Bhattacherjee (2012) confirms that the use of the Internet to collect data has several advantages which include, cost-effectiveness, easy access to a wider population, and less time consumption. A projected conceptual framework was authenticated and the propositions were measured using data attained from the questionnaires. The study focused on university students, graduates, and investors who at least have some basic knowledge of internet usage and the financial market in Kenya. The choice of this sample was borrowed from existing empirical literature on our topic (see Almajali et al., 2022; Shahzad et al., 2024). Data was collected between 1st March 2024 and 30th April 2024. Any correctly completed questionnaire was seen as the participant's implicit authorization to have their data utilized for the investigation.

The intent of the survey was communicated to the participants and their confidentiality was assured in regards to their responses. To estimate PEUS, SUNO, ATTI, and BIUC a 5-item scale introduced by Venkatesh (2000) and later adopted by Almajali et al. (2022) was used. To measure FACO and PEOU, a 5-item scale presented by Venkatesh et al. (2016) and later adopted by Jariyapan et al. (2022) and Almajali et al. (2022) was utilized. Aloosh and Ouzan (2019) and Almajali et al. (2022) used a 5-item scale to estimate PERI which we employed in our study. All the measurement constructs were gauged using a five-point Likert scale (1= strongly disagree, 2= disagree, 3= neither agree nor disagree, 4= agree and 5= strongly agree). For confirmation, the questionnaire was also given to scholarly experts on technology adoption field.

All of the latent constructs' reliability satisfied the 0.50 level upon completion of a preliminary study. Figure 1 shows the conceptual framework of our model.

Figure 1: Research Model



There were 34 questions in the questionnaire that measured the variables in our proposed conceptual framework. Details of the particulars of the questionnaire are presented in Table 1.

Table 1: Measurement of Constructs

Factor	Theoretical foundation	Code	Measurement item
Behavior Intention to Use	TAM2 (Venkatesh and	BIUC1	I'll use cryptocurrencies to make future merchandise purchases.
		BIUC2	I plan to utilize cryptocurrencies on a regular basis.

Cryptocurrency (BIUC)	Davis, 2000; Oliva et al., 2019; Almajali et al., 2022; Chen et al., 2022)	BIUC3	I am going to educate people about using cryptocurrencies.
		BIUC4	I have no doubt that utilizing cryptocurrencies helps me to complete my tasks on schedule.
		BIUC5	I plan to transact internationally using cryptocurrencies.
Perceived Usefulness (PEUS)	TAM2 (Venkatesh, 2000; Nadeem et al., 2021; Almajali et al., 2022; Sagheer et al., 2022)	PEUS1	The cost of paying using cryptocurrency is lower than that of conventional methods.
		PEUS2	I believe that using cryptocurrencies will simplify my transactions.
		PEUS3	With cryptocurrencies, I think I'll make wiser purchases.
		PEUS4	Making payments using cryptocurrencies is quicker and more efficient.
		PEUS5	I'm going to switch to using cryptocurrencies as my payment method.
Perceived Ease of Use (PEOU)	TAM2 (Davis, 1989; Venkatesh and Davis, 2000; Almajali et al., 2022)	PEOU1	I believe using cryptocurrencies will be simple.
		PEOU2	Cryptocurrency, in my opinion, will be simple to utilize.
		PEOU3	I have no doubt that mastering the technology will be difficult.
		PEOU4	In my view, technology has made the use of cryptocurrencies flexible.
Perceived Risks (PERI)	TAM2 (Venkatesh, 2000; Nadeem et al., 2021; Almajali et al., 2022; Sagheer et al., 2022)	PERI1	I think that cryptocurrency use is risky compared to other currencies.
		PERI2	My cryptocurrency transaction details will be misused by other people.
		PERI3	I think that cryptocurrency is too expensive.
		PERI4	I can easily control my money with cryptocurrency.
		PERI5	I believe it is dangerous to exchange my personal information for cryptocurrency payments.
		PERI6	It is difficult to convert cryptocurrency into fiat money.
Subjective Norm (SUNO)	TRA (Ajzen and Fishbein, 1977; Almajali et al., 2022; Jariyapan et al., 2022)	SUNO1	My close friends have persuaded me to transact with cryptocurrencies.
		SUNO2	My close pals insist that I give cryptocurrencies a try.
		SUNO3	The decision I make to buy cryptocurrency is influenced by my close friends.
		SUNO4	My partners encourage me to use cryptocurrencies with positivity.
		SUNO5	My future cryptocurrency use is inspired by my friends.
Facilitating Conditions (FACO)	UTAUT2 (Venkatesh et al., 2012; Abbasi et al., 2021; Almajali et al., 2022)	FACO1	I possess the necessary tools to apply cryptocurrencies.
		FACO2	I have all the essential data to utilize cryptocurrencies.
		FACO3	With the other tools I use, cryptocurrency pairs well.
		FACO4	When I run into issues with cryptocurrencies, I may receive help from others.
Attitude (ATTI)	TRA (Ajzen and Fishbein, 1977; Mazambani and Mutambara, 2019; Abbasi et al., 2021, Chen et al., 2019)	ATTI1	I'm confident that investing in cryptocurrencies is a wise move.
		ATTI2	Using cryptocurrencies for business purposes is undoubtedly a smart idea.
		ATTI3	It makes sense in my opinion to use cryptocurrencies as money.
		ATTI4	Using cryptocurrencies in my business dealings makes me appreciate it.
		ATTI5	The idea of using cryptocurrency makes me feel excited.

The sample comprised 400 people above the age of 20 years living in Kenya. Out of this sample, only 310 people completed the questionnaire, which was approximately 78% of the total sample. 90 questionnaires (22%) were cast off as they were incomplete or wrongly filled. Hair et al. (2014) and Kline (2013), state that the minimal sample size when using a structural equation model (SEM) should be at least 200. Therefore, our sample met the minimum threshold. Evidence shows that one should aim for a higher sample size a bigger sample size in SEM estimation to avert non-response misrepresentations (Sekaran and Bougie, 2019). The cluster area sampling method was employed in the gathering of data. The study was based in Nairobi County where it is estimated that more than 70% of the population is digitally literate and owns at least a phone (Odera and Matiy, 2023). Data was collected from students, graduates, and investors who had information about cryptocurrency (Jariyapan et al., 2022; Sagheer et al., 2022). There were two sections to the questionnaire. The first section comprised four pre-screening queries to select the targeted population. These four closed-ended questions were concerned with the respondents' demographic characteristics. These comprised age, gender, education attainment, and prior internet usage knowledge represented in Table 2. If the interviewees fulfilled these criteria, they would qualify

to participate in the study. The cluster area sampling method was preferred over other probability sampling methods because it was cheap, effective, and time-saving.

Table 2: Characteristics of the Respondents (N=310)

Characteristics	Number	Percentage
	Gender	
Male	170	62%
Female	140	38%
Total	310	100%
	Age	
20-29	130	42%
30-39	90	29%
40-49	70	22%
50 & above	20	7%
Total	310	100%
	Highest Education Level	
High school	30	10%
Diploma	90	29%
Bachelor's degree	110	35%
Master's degree	70	23%
P.h.D	10	3%
Total	310	100%
	Experience on Internet Usage (Years)	
1-5	80	26%
6-10	130	42%
11-15	70	23%
16-20	30	9%
Total	310	100%

4. EMPIRICAL ANALYSIS

4.1. Descriptive Statistics

The study used a univariate normality test and inter-construct correlation to determine the distribution and reliability of each latent construct. The results indicate that our constructs are typically dispersed based on the values of skewness which is lower than the threshold of 3 and kurtosis which has values less than 8, as proposed by Kline (2013). The standard deviation of each variable is also small implying a small dispersion from the mean. The correlation matrix further suggests a strong and favorable association between our independent and dependent latent constructs as represented in Table 3.

Table 3: Descriptive Statistics and Correlation Matrix

	Mean	SD	Kurtosis	Skewness	BIUC	ATTI	FACO	SUNO	PERI	PEOU	PEUS
BIUC	4.092	1.024	1.876	0.889	1.00						
ATTI	3.856	1.057	1.567	0.983	0.21	1.00					
FACO	4.263	1.320	3.215	1.030	0.32	0.28	1.00				
SUNO	4.067	1.020	2.632	0.874	0.01	0.10	0.33	1.00			
PERI	3.995	1.045	3.320	1.320	0.40	0.28	0.18	0.56	1.00		
PEOU	3.890	0.956	4.678	1.585	0.20	0.07	0.32	0.22	0.31	1.00	
PEUS	4.126	0.876	3.45	1.675	0.19	0.14	0.02	0.16	0.24	0.17	1.00

4.2. Exploratory Factor Analysis (EFA)

To ascertain if our model was fit for structural equation modeling (SEM), we assessed the main fit indices which included, the Chi-square test (CMIN/DF), Comparative Fit Index (CFI), Tucker-Lewis's measure (TLI), Root Mean Square Error of Approximation (RMSEA)

and Standardized Root Mean Square Residual (SRMSR). The outcome of our model fit indices as shown in Table 4 were as follows: CMIN/DF=4.10, CFI=0.68, TLI=0.75, RMSEA=0.04, and SRMSR=0.08. based on these results various indices, especially CFI, TLI, and SRMSR were found to be weak. To improve the model's fitness Bryne (2010) suggested the application of preliminary factor analysis to observe the factor loadings and modify them to fit the model. Further, Holmes-Smith et al. (2006) proposed the use of a standardized covariance matrix to improve the model fitness.

After dropping the five measurement items we further re-examined our model of fit indices which showed a significant improvement from the previous test as shown in Table 4. The outcome was regarded as acceptable based on the suggestion by Fornell & Larcker (1988). The CMIN/DF=1.55, CFI=0.92, TLI=0.95, RMSEA=0.02 and SRMSR=0.04. for a model to be deemed fit CMIN/DF$\leq$3.0, CFI and TLI $\geq$ 0.90, RMSEA and SRMSR$\leq$0.05. There was no need to improve or re-organize the estimation model due to the great degree of quality of fit that was achieved by the model (Bryne, 2010).

Table 4: The Goodness of Fit Indices

Model	CMIN	DF	P	CMIN/DF	CFI	TLI	RMSEA	SRMSR
Preliminary model	1124	275	0.00	4.10	0.68	0.75	0.04	0.08
Modified model	410	265	0.00	1.55	0.92	0.95	0.02	0.04

Threshold: CMIN/DF$\leq$3.0, CFI and TLI $\geq$ 0.90, RMSEA and SRMSR$\leq$0.05

EFA was conducted to choose the best factors that have a significant effect on our model. Seven factors with eigenvalues exceeding one were extracted. These factors described 95% of the disparity in our sample. We constructed a scree plot to determine whether the seven factors affected our statistical model. Furthermore, Varimax orthogonal matrix rotation was conducted to determine the variables that would constitute each factor in our model. Five measurement items were lower than the 0.50 criterion as advised by Hair et al. (2014) and were therefore dropped from our regression. These items included: Behavior intention to use cryptocurrency BIUC3, perceived ease of use PEUS5, perceived risk PERI6, subjective norm SUNO4, and attitude ATTI5. Table 5 shows the items that load on the seven extracted factors in our model. In this table all the measurement items exceeded 0.6, implying the reliability of our factors.

4.3. Confirmatory Factor Analysis

4.3.1. Construct Reliability Test

To evaluate the internal coherence of our latent components, the study used Cronbach's alpha (CA), Composite Reliability (CR), and Average Variance Extracted (AVE). The study confirmed that all the standardized items were statistically significant with values above the recommended threshold. For the Cronbach alpha test, the recommended limit is 0.7 as proposed by Nunnally and Bernstein (1994). Consequently, for the Composite dependability test, the suggested threshold is also 0.7 while the AVE cutoff stands at 0.5 as recognized by Hair et al. (2010). Table 5 illustrates that Perceived Usefulness (PEUS) scored the highest CA value while Facilitating Condition (FACO) had the lowest CA value. Further, our AVE values are above the 0.5 verge with Subjective Norm (SUNO) Having the highest AVE of 0.876 and Attitude having the lowest AVE of 0.754. Perceived Ease of Use (PEOU) scored the maximum CR value at 0.894 while Perceived Risk scored the lowest CR value of 0.765, which was still above the recommended cutoff value.

4.3.2. Construct Validity Test

The study used factor loadings to establish the extent to which a given item represents the latent construct. All the retained items were statistically meaningful ($p<0.05$) with factor loadings of more than 0.6 which surpassed the tolerable limit of 0.50 as proposed by Hair et al. (2010). Table 5 displays the loadings of each measurement item in our model. To assess the level of discriminant validity we utilized the Fornell-Larcker (FL) condition. According to Fornell-Larcker (1988), the variances of measurement items that signify a latent construct should not exceed their AVEs. The FL test shows how measurement items are different from each other. Table 6 confirms that the transverse results that characterize the square root of individual latent construct AVE are higher than its standardized correlation coefficients, and they differ from each other. This outcome confirms that there is discriminant validity in our model (Kline, 2013).

Table 5: Measurement Constructs and Factor Loadings

Constructs & Items	FL	SE	SMC	EV	CA	CR	AVE
Behavior intention to use Crypto (BIUC)					0.941	0.794	0.781
BIUC1	0.651	0.012	0.534	0.467			

BIUC2	0.783	0.023	0.678	0.576			
BIUC4	0.832	0.042	0.743	0.534			
BIUC5	0.824	0.052	0.654	0.489			
Perceive Usefulness (PEUS)					0.967	0.876	0.810
PEUS1	0.754	0.032	0.763	0.657			
PEUS2	0.882	0.043	0.682	0.546			
PEUS3	0.781	0.024	0.589	0.432			
PEUS4	0.843	0.065	0.756	0.487			
Perceived Ease of Use (PEOU)					0.898	0.894	0.834
PEOU1	0.782	0.043	0.738	0.632			
PEOU2	0.761	0.056	0.548	0.532			
PEOU3	0.704	0.034	0.645	0.432			
PEOU4	0.822	0.023	0.765	0.543			
Perceived Risk (PERI)					0.912	0.765	0.798
PERI1	0.693	0.045	0.652	0.432			
PERI2	0.764	0.032	0.764	0.321			
PERI3	0.721	0.046	0.788	0.462			
PERI4	0.802	0.055	0.540	0.635			
PERI5	0.783	0.021	0.636	0.534			
Subjective Norm (SUNO)					0.941	0.832	0.876
SUNO1	0.801	0.065	0.691	0.444			
SUNO2	0.831	0.043	0.786	0.598			
SUNO3	0.874	0.029	0.587	0.322			
SUNO5	0.823	0.032	0.671	0.435			
Facilitating Conditions (FACO)					0.889	0.865	0.765
FACO1	0.682	0.032	0.678	0.456			
FACO2	0.703	0.056	0.784	0.576			
FACO3	0.751	0.021	0.534	0.321			
FACO4	0.713	0.041	0.687	0.422			
Attitude (ATTI)					0.902	0.865	0.754
ATTI1	0.831	0.067	0.765	0.587			
ATTI2	0.863	0.034	0.556	0.354			
ATTI3	0.882	0.041	0.678	0.456			
ATTI4	0.791	0.026	0.641	0.345			

Note: FL (Factor Loadings), SE (Standard Errors), SMC (Square Multiple Correlation), EV (Error Variance), CA (Cronbach Alpha), CR (Composite Reliability), AVE (Average Variance Extract)

Table 6: Fornell-Larcker (FL) Criterion

	BIUC	**ATTI**	**FACO**	**SUNO**	**PERI**	**PEOU**	**PEUS**
BIUC	0.872						
ATTI	0.465	0.943					
FACO	0.356	0.254	0.894				
SUNO	0.654	0.675	0.334	0.856			
PERI	0.422	0.453	0.465	0.563	0.987		
PEOU	0.324	0.645	0.532	0.325	0.356	0.875	
PEUS	0.54	0.521	0.467	0.532	0.243	0.452	0.921

The key transverse displays the square root of the mean variance resulting from the whole measurement item constructs. While off-diagonal represents correlations between constructs.

4.4. Structural Equation Model Results

The goodness of fit of the model confirms that our structural model is appropriate for SEM with CMIN/DF=2.25, CFI=0.90, TLI=0.92, RMSEA=0.04, and SRMSR=0.01. Further, our path coefficients confirm that many of the construct relationships are statistically meaningful at p<005 as shown in Table 7. Out of the ten hypotheses, only one hypothesis was not supported. Our regressed model confirmed that conceived usefulness and conceived ease of use had a positive outcome on behavior intent to use cryptocurrency among Kenyans with P=0.00 and P=0.039 respectively. Consequently, the effect of perceived utility and perceived usability on attitude was found to be significant with all the paths having P=0.000. Additionally, perceived usefulness and convenience of use were favorably correlated with P=0.000. Perceived risk had an adverse but statistically meaningful relationship with attitude and behavior intent to utilize cryptocurrency at P=0.014 and P=0.010 respectively. Attitude and subjective norm affected behavior intention to use cryptocurrency positively with P=0.010 and P=0.000 respectively. Finally, facilitating conditions also confirmed its significant role in behavioral intent to utilize cryptocurrency with P=0.000. Almajali et al. (2022)

Table 7: Structural Equation Model Results

Hypothesis	Proposed Path	Betas (β)	Std. error	t-value	p-value	Empirical Results
Direct effect						
H1	PEUS –> BIUC	0.123	0.032	3.844	0.000	Supported
H2	PEUS –> ATTI	0.264	0.066	4.100	0.000	Supported
H3	PEOU –> BIUC	0.196	0.039	5.026	0.039	Supported
H4	PEOU –> ATTI	0.567	0.078	7.269	0.000	Supported
H5	PEOU –> PEUS	0.653	0.085	7.683	0.000	Supported
H6	PERI –> BIUC	- 0.108	0.043	2.512	0.010	Supported
H7	PERI –>ATTI	- 0.223	0.090	2.478	0.014	Supported
H8	ATTI –> BIUC	0.109	0.042	2.595	0.010	Supported
H9	SUNO –> BIUC	0.383	0.067	5.716	0.000	Supported
H10	FACO –> BIUC	0.178	0.101	1.762	0.593	Not supported

The role of attitude as a mediatory construct was also established in Table 8. When an indirect effect exceeds a direct effect, then a complete mediating outcome will be supported (Hair et al., 2010). The mediating hypotheses outcomes confirmed that attitude had a significant mediating effect on the association between perceived usability, perceived ease of use, perceived risk, and behavior intention to use cryptocurrency in Kenya.

Table 8: Mediating Hypotheses Results

Hypothesis	Proposed Path	Direct outcome	Indirect outcome	Mediation	Findings
Mediating effect					
H11	PEUS–>ATTI–>BIUC	0.040	0.145	Mediation	Supported
H12	PEOU–>ATTI–>BIUC	0.002	0.157	Mediation	Supported
H13	PERI–>ATTI–>BIUC	0.003	0.167	Mediation	Supported
H14	PEUS –> PEOU –> ATTI–> BIUC	0.010	0.134	Mediation	Supported

The favorable impact of perceived utility on the intent to utilize cryptocurrencies implies that if users are convinced that implementing an innovative technology will increase their capabilities and skills, then their behavioral intent to embrace usage of cryptocurrency will rise (Jariyapan et al., 2022). Consistent with this finding is that of Kher et al. (2021), Jariyapan et al. (2022), and Sagheer et al. (2022). Further, our verdict confirms that people are prone to utilize cryptocurrency when their experience and familiarity with technology improve their self-efficiency and reduce anxiety about using computers. Thus, our results confirm that the perceived ease of using technology is significant in determining cryptocurrency use (Wilson et al., 2021; Chen et al., 2019; Shahzad et al., 2022).

Further, individuals who are computer literate find it easy to adopt cryptocurrency and use it in their daily transactions. During COVID-19 it was estimated that more than 80% Kenyans utilized technology to do business because of their perception to easily use computers. Therefore, perceived usability played an important part in the perceived utility of cryptocurrency (see, Sagheer et al., 2022; Illia et al., 2023). Conversely, conceived risk and intent to adopt cryptocurrencies are negatively yet significantly correlated.

Thus, if the risks of using cryptocurrency are high, then individuals will shy away from using cryptocurrency in their daily business. This result confirms that of Khan et al. (2017), Mendoza-Tello et al. (2018), Jariyapan et al. (2022), and Illia et al. (2023).

PERI negatively affects ATTI. This means that as individuals perceive the risk to be high, they will have a negative attitude toward the adoption of technology (Almajali et al., 2022; Shazaad et al., 2024). On the contrary, PEUS and PEOU were found to positively affect ATTI (see, Nadeem et al., 2021; Jariyapan et al., 2022). Consequently, the positive effect of ATTI on BIUC confirms that individuals who are confident about cryptocurrency as a medium of exchange are likely to utilize it. Investors adopt the use of cryptocurrency because they expect some short-term returns like improved standards of living and goals. The subjective norms' impact on behavior intent to use cryptocurrency confirms that references from friends and family significantly affect BIUC. An individual's social surroundings will influence his decision to adopt cryptocurrency use. The bond an individual has with his/her family and friends will lead to them following their suggestions and investment strategies (Nadeem et al., 2021; Jariyapan et al., 2022; Illia et al., 2023).

Conversely, the minimal connection between enabling conditions and behavior intent to use cryptocurrency shows that with technological advancement, cryptocurrency use is easily facilitated by devices like a smartphone, computers, laptops, and tablets with proximity to the internet (Merhi et al., 2019; Almajali et al. 2022). According to the Communications Authority of Kenya (2023) smartphone penetration stood at 61 percent in 2023. Remarkably, we can conclude that at least all our respondents' owned smartphones and were capable of using either a laptop, tablet, or smartphone. This finding contradicts that of Hussain et al. (2023) which emphasizes the importance of facilitating conditions for cryptocurrency acceptance.

The mediatory role of attitude towards perceived usefulness, perceived usability, and behavior intent to utilize cryptocurrency were found to be notable. This infers that as individuals' attitude toward utilization of cryptocurrency increases due to improved perceived usability and perceived utility then cryptocurrency adoption will significantly rise. This resonates with Nadeem et al. (2021), and Jariyapan et al. (2022). Furthermore, our results show that attitude plays an important mediatory role between perceived risk and behavioral intent to adopt cryptocurrency. Therefore, as risk perception decreases then the attitude toward using cryptocurrency in electronic transactions will improve leading to high demand for cryptocurrency (see, Aloosh & Ouzan, 2020; Nadeem et al., 2021; Almajali, 2022; Jariyapan et al., 2022).

Finally, being the first empirical research on determinants of cryptocurrency adoption in Kenya, the outcome of this research is based on the sample size and the sample collected which provides a robust insight on factors that determine cryptocurrency adoption in Kenya.

5. CONCLUSION AND IMPLICATIONS

Existing empirical literature on cryptocurrency adoption in Sub-Saharan Africa is still scant despite Kenya, Ghana, Nigeria, and South Africa featuring in the list of fast-growing countries in the world that are adopting cryptocurrency use. Consequently, existing studies in Africa provide inconclusive results regarding cryptocurrency use. Most studies concentrate on specific models of technology adoption. Therefore, this research merged the theory of reasoned action and some aspects of the technological acceptance model to explain the determinants of electronic currency adoption in Kenya. There is no empirical study in Kenya that has examined factors influencing the utilization of cryptocurrency despite its increased adoption. A regression model was developed and its reliability and validity were tested before estimation was done.

The study outcome confirmed that if Kenyans are persuaded that implementing a technology innovation will improve their capabilities and skills (perceived usefulness) and at the same time reduce their anxiety because of literacy in technology use (perceived ease of use), then their behavioral intention to use cryptocurrency will increase (see Chen et al., 2021; Shafique et al., 2022; Jariyapan et al., 2022; Illia et al., 2023). Further, if they perceive the risks to be high, then individuals will stop using cryptocurrency in their daily transactions. Therefore, confidence in cryptocurrency as a medium of exchange that will bring short-term returns will also influence its uptake (Albayati, 2020; Nadeem et al., 2021; Almajali, 2022). Equally important, is the influence people have from friends, family, and trusted individuals which impacts their behavioral intent to use cryptocurrency.

Facilitating condition was however found to be insignificant in influencing the adoption of cryptocurrency because of technological evolution which has ensured more than 60% of Kenyans at least own a phone, laptop, or tablet, which facilitates e-commerce (Shaw and Sergueeva, 2019; Merhi et al., 2019; Shafique et al., 2022, Jariyapan et al., 2022; Illia et al., 2023). Our results also confirm that the aspirations of individuals can also play a mediatory role between perceived usefulness, perceived ease of use, perceived risk, and behavior intent to adopt cryptocurrency use (Aloosh and Ouzan, 2020; Albayati, 2020; Nadeem et al., 2021; Almajali, 2022). In light with these findings, this study has established that the variables that constitute the theory of reasoned action and technological acceptance model are useful in forecasting behavioral intent to use cryptocurrency in Kenya. Our outcomes are in line with other existing empirical literature like that of Shafique et al. (2022), Jariyapan et al. (2022), and Illia et al. (2023).

Based on our findings, we suggest the following practical implications. First, the government and financial institutions can use these findings to redesign and introduce policies and frameworks that would ensure some regulations guide blockchain technologies to ensure security in Kenya. These frameworks should include factors such as perceived risks, ease of use, and usefulness to ensure robustness. Second, there should be mass social awareness through conferences, workshops, and mass media on the benefits and shortcomings of adopting cryptocurrency use. This will change the attitude and perception of individuals regarding cryptocurrency usage and at the same time assist policymakers to formulate policies that regulate the cryptocurrency market both in the immediate as well as distant future. Third, companies that deal with cryptocurrency in Kenya should create trusted platforms and educate the population on how to buy and transact using cryptocurrency. Additionally, customer-friendly interaction between investors and users should be indoctrinated to improve subjective norms toward cryptocurrency adoption. Lastly, the regulator can launch an e-cash system built on a platform that would easily transact cryptocurrency with the Kenyan shilling to ensure easy regulation and monitoring of blockchain institutions.

Constraints of this inquiry are grounded on the fact that the sample size was minimum and the familiarity of interviewees with cryptocurrency was not established. This could lead to individuals who are familiar with cryptocurrency placing more emphasis on certain factors as opposed to those with no idea about cryptocurrency. Therefore, forthcoming studies should distinguish the respondents in terms of their acquaintance with cryptocurrency to improve the model's descriptive power. Another constraint stems from the impact of certain constructs like attitude and behavioral intent to use cryptocurrency which can be effectively measured over some time. However, our measure of these constructs was cross-sectional. Further, this study did not factor in psychological, social, and hedonic factors which also assumes a significant part in determining cryptocurrency adoption. Finally, the classification of risks into operational, financial risk, etc. would also shed more light on which risks significantly affect behavior intent to use cryptocurrency.

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