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## Factors Affecting Intention Behind the Use of Cryptocurrency

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**Abstract:** *This study aims to examine the relationship between cryptocurrency by using factors (Security, Perceived Ease of Use, E-WOM, Web Quality and Performance Expectancy) with the Intention of using Cryptocurrency. This study examines the use of cryptocurrency as well as customers. In this study, a survey method was used to collect data from the respondents, which included businessmen and business students. For data analysis, the Structural Equation Model (SEM) was adopted using partial least squares via smart PLS4. This software is the most recent and relevant software to access data. The test was applied through PLS for the assessment of the measure model and for the assessment of the structural model. Assessment of the measure model shows positive results for reliability and validity, and the result of the structural model shows that the hypotheses generated for this study have been accepted.*

**Key Words:** Security, Perceive Ease of Use, Web Quality, EWOM, Performance Expectancy, Trust, Intention to Use Cryptocurrency

### Introduction

In this modern age of uncertainty, one prefers to go cashless as cash is more specious, riskier to carry and not so easy to transfer by the means of financial system. Hence, this inconvenience was taken very well by the technologist and cash was replaced by plastic money first and then by digital money. This digital money is termed as cryptocurrency in the literature (Farell, 2015). Among all cryptocurrencies, bitcoin is the more popular currency based on the concept of eliminating financial obligations from the ends of government and third parties (Besson, 1999). Cryptocurrencies can be defined as virtual assets constructed totally on encryption that can be used as an exchange medium in a peer-to-peer network (DeVries, 2016). Cryptocurrency is mathematical, having no central authority and is transferrable, safeguarded by cryptography and has similar worth in terms of actual currency (Kolb, 2018). A cryptocurrency is a computer-generated system that features just like a general currency, allowing users to provide digital charges for goods and services offerings free from a central trusted authority (Farell, 2015).

Cryptocurrency works on the principle of resolving encryption algorithms to create explicit hashes that might be finite in number. Combined with a network of computer systems verifying transactions, customers can change hashes as if replacing physical currency.

Cryptocurrency have experienced broad market acceptance and speedy improvement in spite of their recent theory (Hong, 2018). Many border price range and asset managers have begun to consist of cryptocurrency-related assets in their portfolios and buying and selling techniques. The academic community has further spent general effort in gaining knowledge of Cryptocurrency buying and selling (Fang et al., 2022). Value exists for Bitcoin because its customers trust that if they receive it, they can use it somewhere else to buy something they need or want (DeVries, 2016). Cryptocurrency was first

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introduced in the US by cryptographer David Chaum in the 1980s. He introduced the first form of Cryptocurrency, E-Cash. In 1984, after making ECash, Chaum made an electronic payment system that was undetectable by the banking system or government agencies through virtual assistance. Cryptocurrency, the main and important currency, is Bitcoin. Bitcoin was introduced by Nakamoto in 2009 and had initially brought up to 50 bitcoin in circulation (Fauzi et al., 2020).

Cryptocurrency is also gaining acceptance in Pakistan. Pakistan's first cryptocurrency, Pakcoin, was introduced in 2015 (Bala, 2022). Starting around 2009, payment systems have witnessed a lot of development, including solutions like Easypaisa. The acceptance and development of these systems predict that there is potential for the development of cryptocurrency in the country. In November 2017, the IMF boss suggested that Pakistan not dismiss digital currency because of customer preferences (Chen et al., 2022). However, the State Bank of Pakistan (SBP) and the Federal Board of Revenue have closed down using virtual currency within the financial system. The SBP (2016) does not recognize any digital currency (Khawaja et al., 2020). In April 2018, the government stated through a circular that the trade of currencies of this sort is not being supported by the authorities and must be reported (Kayani et al., 2021). Along with this, the Federal Board of Revenue and Federal Investigation Agency have taken legal action against Pakcoin in addition to globally identified currencies, which include One Coin and Bitcoin (Afzal, 2019). Grignon (2009) described digital money in his study as a digital object with a distinctive serial number that can be directly traded while remaining anonymous. It has been noticed that the usage of digital money has been significantly increasing. Hence, bitcoin is more of a virtual form of currency as it works by cryptographic algorithms to make the currency digitally functioning. Cryptocurrencies are not given or authorized by any one party or authority, and they are not given assurance. Rather, it works through assurance of people in a group using the crypto currency (De Albuquerque & De Castro Callado, 2015). Therefore, a few digital currencies e.g. the Linden dollar and Aviation Care Coins might be able to be converted to actual money, but it might not always be the case because most of currencies known as "closed" currency are able to be converted to only one way rather than to be traded for real (Financial Action Task Force, 2014).

Bitcoin is emerging as a great technology and mode of payment overall in the world, but still, the familiarity level is very low, and many are curious, so there is a need to compile the basic information to enlighten people, keeping Pakistan's especially rural view in focus. Moreover, this paper will be very helpful for students, software developers, tech entrepreneurs, and researchers in computer science. In Pakistan, a few people are acquainted with cryptocurrencies and Bitcoin. This paper is a complete solution for them as it provides everything one needs to know about the new global money. Since they give users worldwide financial independence from banks and governmental controls, cryptocurrencies are also useful in the fight against money laundering. You can look forward to a secure investment for your hard-earned money right away with the help of these crypto coins. A major benefit of digital currencies' transparency is that transactions can be easily tracked and validated, which is crucial in the fight against crimes like tax evasion and money laundering. Government regulation of cryptocurrencies is necessary to make banks more dependable and trustworthy, particularly in terms of customer interactions and the proactive policing of illegal activities.

## Problem Statement

Studies state that the future might be of cryptocurrencies and specifically bitcoins, as the worth of bitcoin is increasing day by day, and its use and awareness are spreading at a very fast pace all across the world (Henry et al., 2019). Meanwhile, in Pakistan, the awareness and involvement towards cryptocurrency are very low. This study examines the factors impacting user's trust and intention to use cryptocurrency. This research will ultimately help understand the factors that are more important in developing trust among customers and how an economy can get an advantage from the usage of cryptocurrency.

## Purpose of Study

This study aims to help economists understand the factors that can be helpful in order to generate trust

as well as intention to use cryptocurrency. This may help countries adopt cryptocurrencies as a payment method or for operations with more ease globally.

## Research Gaps

Studies have emphasized the awareness and benefits of cryptocurrency on the economy up till now. This project will help understand different factors of cryptocurrency and how these factors work in the mediation of trust to increase the behavioral intention of Pakistani people to use cryptocurrency.

## Research Question

- RQ1:** Is there a link between security and trust?
- RQ2:** Is there a link between perceived ease of use and trust?
- RQ3:** Is there a link between E-WOM and trust?
- RQ4:** What is the link between web quality and trust?
- RQ5:** What is the nexus between performance expectancy and trust?
- RQ6:** Is there a link between security and intention to use cryptocurrency?
- RQ7:** Is there a link between perceived ease of use and intention to use cryptocurrency?
- RQ8:** Is there an association between E-WOM and intention to use cryptocurrency?
- RQ9:** Does the web quality link with the intention to use cryptocurrency?
- RQ10:** Does the performance expectancy connect with the intention to use cryptocurrency?
- RQ11:** What is the link between trust and intention to use cryptocurrency?

## Research Objectives

- RO1:** To identify the impact of security on trust.
- RO2:** To find the impact of perceived ease of use on trust.
- RO3:** To ascertain the influence of E-WOM on trust.
- RO4:** To determine the effect of web quality on trust.
- RO5:** To identify the impact of performance expectancy on trust.
- RO6:** To measure the influence of security on the intention to use cryptocurrency.
- RO7:** To examine the effect of perceived ease of use on intention to use cryptocurrency.
- RO8:** To identify the impact of E-WOM on the intention to use cryptocurrency.
- RO9:** To determine the influence of web quality on intention to use cryptocurrency.
- RO10:** To inspect the influence of performance expectancy on intention to use cryptocurrency.
- RO11:** To investigate the impact of trust on the intention to use cryptocurrency.

## Significance of the Study

This study will add to the body of knowledge about the factors that may impact the development of trust and intention to use cryptocurrency. This study will give insight into how cryptocurrencies can be trusted in order to get benefits for developing economies.

## Scope of the Study

This study is an attempt to draw researchers' attention towards cryptocurrency to improve the financial system and individual transaction system. Cryptocurrency is designed to be a less costly and easier-to-use type of money (Bala, [2022](#)).

## Literature Review Cryptocurrency

The initial and globally recognized type of cryptocurrency in the world, Bitcoin, was created in 2008 by Satoshi Nakamoto. Electronic money is simply money deposited into an account through a bank or payment terminal; in contrast, cryptocurrency is an asset produced through the Internet and is not linked to any common currencies. Bitcoin is a cryptocurrency, not electronic money (Thesis & Bachelor, [2021](#)). One of the main factors contributing to cryptocurrencies' success in the financial sector is the fact that blockchain-based cryptocurrencies guarantee consumers' data privacy and security (Banerjee et al.,



[2018](#)). The most well-known cryptographic money, with the greatest market capitalization (\$1.058 trillion as of April 2021), is Bitcoin (Klarin, [2020](#)). The feature of cryptocurrency that it can be transacted around the globe through the internet makes it different from traditional currency as traditional money cannot be transacted freely across the globe, and it has limits of boundaries (Reynolds & Irwin, 2017). Cryptocurrencies are not given or authorized by any one party or authority, and they are not given assurance. Rather, it works through the assurance of people in a group using the cryptocurrency (Financial Action Task Force, 2014). Therefore, a few digital currencies, e.g., the Linden dollar and Aviation Care Coins, might be able to be converted to actual money, but it might not always be the case because most currencies known as “closed” currency are able to be converted only one way rather than to be traded for real (Financial Action Task Force, 2014). Crypto currency means mathematical, having no central authority and transferrable, safeguarded by cryptography and having similar worth in terms of actual currency (Financial Action Task Force, 2014). Crypto currency came into existence in 1983 through a process suggested by Chaum regarding cash system given by bank which comprised of coins signed secretly hence developing undetectable payments (Chaum, 1982). These secretly signed coins made it possible to develop unlink ability among transactions of customers which helped in avoiding the check and balance from financial institutions (Bonneau et al. 2007)

## BitCoin

Bitcoin was defined in 2008 by a hidden name, Satoshi Nakamoto, and it was propagated to Cypherpunk’s mailing list (Nakamoto, 2008). Bit coin’s genesis block was first mined on 3<sup>rd</sup> January 2009, and its initial use is considered to be in May 2010, when a pizza was ordered by one person for another involving the exchange of 10,000 Bitcoins. From that time period, Bayern (2013) developed an argument that it may be necessary for users of Bitcoin to work independently on computer programs made available for the transfer of money. Bitcoin differs from past models of digital currency as it does not assign digital monetary units to the users; rather, each Bitcoin address has a unique fingerprint (Eskandari, Barrera, Stobert and Clark, 2015, which is a ‘signature’ comprising of a unique public key that allows the individual users of the bitcoin to transfer funds with their identities being hidden. Through the acquisition of public user keys rather than the accounts, the users have the ability to sign authority of the accounts instead of holding units of currency (Eskandari et al., 2015). Hence, peer-to-peer transfer of funds can occur with the help of these user keys, and eventually, users gain an anonymous identity instead of traditional financial transactions in case account information is available to users. From the point of view of Ali et al., the reveal of a “distributed ledger” is the main innovation because traditional payment systems depend on intermediaries to complete transactions between two users, i.e., the buyer and seller, but on the other hand, the bit coin’s validation process is not hierarchical meaning no middlemen are involved in transactions (Ali et al., 2014). There is now a huge number of users who are mining through the internet with the use of computers, continuously validating transactions by obtaining blocks together and eventually adding them to the ledger, hence making a ‘blockchain’(Singh & Singh, [2016](#)). In return, miners are awarded with Bitcoins as their remuneration (Bariviera et al., [2017](#)). Bitcoins create hurdles for law enforcement agencies as well because the public keys of users are traceable, but even then, their original identity remains hidden until other methods of confirming the identity data are used, for example, the registration of email address that is linked with the account (Dion, 2013). If the information provided by the user is fraudulent or wrong or even there is no information, then the process of detection becomes limited. Nakamoto consensus protocol is the main driving technological force that enables the systems to manage a ledger called the block chain (Eyal et al., [2015](#)). The blockchain gives an opportunity to develop a system free from intermediaries, i.e., the financial institutions and ensure it is the basis for a new way of online transactions, and it will also add with it the process of anonymous transactions (Eyal et al., [2015](#)).

## Security

The adoption and development of the usage of Bitcoin in the future considerably rely on the security of cryptocurrencies. Although it is impossible to directly identify the Bitcoin users who are purportedly the owners of the Bitcoin addresses, the transactions they carry out are visible on the public Blockchain (Garcia et al., [2014](#)). Other users are unable to identify a Bitcoin address, but they may see how many

Bitcoins are sent to or received from the owner's name (Nasir et al., 2015). There is a significant risk to users when using debit/credit cards online. Hackers have the ability to get PIN numbers or security passwords and conduct illegitimate business.

## E-WOM

Electronic word-of-mouth (E-WOM) is a powerful marketing strategy since it has the potential to quickly reach a broad audience (Gil-Cordero et al., 2020). Electronic word-of-mouth refers to the dissemination of information about experiences and views over the internet (E-WOM) (Almajali et al., 2022). One of the most reliable sources for disseminating information about goods and services on social media platforms is electronic word of mouth (E-WOM) (Jusoh, 2019). The management of customer feedback as E-WOM on social media platforms for influencing consumer purchasing behavior is a challenging task for marketers (Jusoh, 2019). The changes made to the E-WOM platforms have benefited the users as well (Jalilvand & Samiei, 2012). After the launch of social media, people now have access to inspect the individual who is sharing his or her experience about the good or service. Previously, platforms with one-way E-WOM conversations dominated (Khwaja et al., 2020). The two-way interactive communications offered by social media are one of its advantages over other platforms. It not only offers the chance to engage with friends, peers, family members, and coworkers on a lively digital platform but also makes it possible to find reviews from random people for purchasing or looking for a particular good or service. While E-WOM's impacts are harder to manage than traditional WOM's, it allows advertisers the opportunity to sell items all the more really and target customers all the more unequivocally. The availability of Web-based consumer review platforms on the Internet allows users to engage in (E-WOM) conversation with a huge number of other users by exchanging and sharing their opinions and impressions of goods and services.

## Web Quality

Web quality is how people assess whether a website's features fulfill their demands and indicate the site's overall extent (Gil-Cordero et al., 2020). Since web quality is a complicated idea, there should be many different ways to quantify it (Mendes & Mosley, 2006). Construct identification and measurement initiatives appear to receive less emphasis in recent online quality studies. Although there is a considerable academic study, it is disorganized and typically only analyses the meaning of a few specific web quality aspects (Aladwani & Palvia, 2002). The creation of websites and applications involves a combination of print publication and software development, marketing and computing, internal communications and external connections, and art and technology (Aladwani & Palvia, 2002). The multidimensional nature of Web sites and applications includes technical computing, information architecture, content authoring, navigation, presentation, and appearance, a variety of user audiences, legal and ethical concerns, network performance, and heterogeneous operational environments (Mendes & Mosley, 2006). Due to the consumer's lack of online experience, factors like reputation are used to establish confidence. The consumer can choose to carry out higher-risk procedures, such as placing an order, once this initial phase has been successfully completed. Researchers can identify a relationship between trust and web quality in this context, which will be important for boosting intentions to use cryptocurrency (Gil-Cordero et al., 2020)

## Hypotheses Development

### Relationship between Security and Trust

(Weichbroth et al., 2023) A study was conducted using the security of cryptocurrencies as a variable to find technological and human factors involved. It was a critical literature review, and it concluded that security is a major concern that has been affected by both technological and human factors. (Bucko et al., 2015) mentioned security and privacy aspects in their study, elaborating that these can be found at various stages in the Bitcoin system. The first aspect includes the security of blocks and blockchains, the second aspect is related to the security of the generation algorithm, and the third one is network security. This study determined that most variables interact with one another, have cumulative impacts, and collectively influence trust in cryptocurrencies. (Bucko et al., 2015) Confidence in the technology is the key aspect that may lead to the establishment of trust in cryptocurrencies. (Armash et al., 2010)



conducted a study that was useful for online marketers in Malaysia. The study aimed to enhance the loyalty of their customer and consequently generate more revenue. In this study, it was indicated that trust is an ability to depend on a partner in a trade-in whom one has belief. Trust consists of two distinct dimensions: credibility and benevolence. The results identified that there is a relationship between trust and security, and these variables help in the generation of loyalties in online marketing.

**H1:** Security is significantly associated with Trust

### Relationship between Perceived Ease of Use and Trust

(Mofokeng, 2023) conducted a study. Perceived Ease of Use stands for "The person's perception to find the use of a particular system to relieve him or her from mental and physical effort" is what. Perceived perception of effortless usage of Internet interfaces is referred to as Perceived Ease of Use, which defines the degree of non-complexity. It has been discovered that being comfortable and having enough computer knowledge can increase a person's sense of self-worth and reduce the stress related to implementing new technology quickly. (Tu et al., 2012) It is stated that telecom firms enhance their mobile marketing services and products by creating better, dependable, and user-friendly solutions to meet the needs of their clients. A proportional influence of Perceived Ease of Use and Trust on the adoption of mobile marketing has been identified in this study.

**H2:** Perceived Ease of Use is Significantly Associated with Trust

### Relationship between E-WOM and Trust

(Ashfaq, 2023) conducted a study defining that their affiliation with a digital environment can have economic rewards in terms of recognition and social inclusion. Consumers have started adopting E-WOM communication to participate actively in and correspond to virtual platforms. Customers might, on occasion, leave comments on review websites. (Seo et al., 2020) conclude that the study divides social media usage features into three categories: personality traits, social traits, and information traits. Each of these usage features presents a method to increase the airline's actual brand equity through e-WOM and the adoption of empirical methods. The results of the research are anticipated to offer important data for formulating an airline's social media strategy. This study focused on the relationship between E-WOM and Trust, the relationship between E-WOM and brand Awareness, and the relationship between E-WOM and Brand Image.

**H3:** E-WOM is significantly associated with Trust

### Relationship between Web Quality and Trust

(Qalati et al., 2021) conducted a study identifying that web quality is essential to business success because it serves as the customer-company communication path. Meta-analysis on user-perceived web quality came to the conclusion that it significantly affects usability, utility, and playfulness. It was also suggested that it promotes the usage of websites for online shopping. According to (Qalati et al., 2021), the relationship between perceived service quality, web quality reputation, and online purchase intention is largely mediated by trust. Whereas (Kouser et al., 2018) contributed that web quality and e-commerce user trust in Online buying intention are positively correlated with social media websites. Users' perspectives on online buying served as a partly mediating factor. In e-business and online buying, it is widely accepted that trust is essential to the development of long-term relationships between buyers and sellers.

**H4:** Web Quality is Significantly Associated with Trust

### Relationship between Performance Expectancy and Trust

(Arias-Oliva et al., 2019) A study was conducted defining that a person believes utilizing a particular technology will be beneficial to improve his or her performance. The most crucial element in a cryptocurrency's success is its performance expectancy. Additionally, this study discovered moderating impacts of financial literacy on the relationship between behavioral intention to use cryptocurrencies, social influence, performance expectancy, and security. (Dr. J. Heuven, 2020) contributed that it is a reasonable assumption that as a user's performance improves as a result of adopting technology, their

desire to utilize it also grows. The best predictors of utilizing technology are behavioral intention and performance expectancy. (Rogers, [2010](#)) Due to the irregularity of information and the uncertain environment of e-commerce, trust is more important and complicated than it is in general and conventional business. This study focused on the relationship between trust and customer attitude and the relationship between trust and Internet banking adoption. The results of this study show that there is a positive relationship between trust and customer attitude and a positive relationship between trust and Internet banking adoption.

**H5:** Performance Expectancy is significantly associated with Trust

### Relationship between Security and Intention to use cryptocurrency

(He et al., [2015](#)) conducted the study focusing on essential frameworks and techniques for mobile banking security to ensure a secure and reliable mobile banking system. This study was an in-depth research on account signatures and account profiling tools that can enhance the system of detecting fraud. To better increase security awareness among mobile banking app developers and users, workflow technology can be used to model various mobile banking security issues, such as how to replicate an attack on mobile bank deposits.

**H6:** Security is significantly associated with Intention to Use Cryptocurrency

### Relationship between Perceived Ease of Use and Intention to Use Cryptocurrency

(Huang et al., [2022](#)) conducted a study where “Baidu” and other e-platforms for teaching and learning activities were utilized to evaluate university students' perceptions of how easy it is to learn on the Internet. In a significant number of technology acceptance studies carried out in many contexts and cultures, Perceived Ease of use is usually regarded as a fundamental determinant of attitude and perceived usefulness. One of the most important variables influencing user adoption of technology is perceived ease of use.

**H7:** Perceive Ease of Use is significantly associated with Intention to Use Cryptocurrency

### Relationship between E-WOM and Intention to Use Cryptocurrency

(Iqbal et al., [2022](#)) conducted a study defining electronic word-of-mouth, which has performed a significant role in influencing consumers' opinions of any goods or services. It is a method of using customers' experiences to market any good or service to them. E-WOM is the term for an informational interaction with friends, family, or customers about any brand or business. This study aims to compare the effects of social networking sites and online stores on consumers' intentions to purchase cell phones. (Rahaman et al., [2022](#)) The study's findings give marketing managers a perspective on how E-WOM information affects social media users' intentions to make online purchases. The study's findings will also help marketing and business managers make better use of social media websites by assessing customer behavior and concentrating on the features of E-WOM content.

**H8:** E-WOM is significantly associated with Intention to Use Cryptocurrency

### Relationship between Web Quality and Intention to Use Cryptocurrency

(Saleem et al., [2022](#)) A study was conducted defining the characteristics of a website that contribute to online customer fulfillment, which are referred to as web quality. The website serves as every customer's first impression, making it an essential component for retailers' success. Whereas (Büyüközkan et al., [2007](#)) contributed that web quality in e-learning service provider's primary method of communication with e-learners is through the Internet, unlike some other e-service Web quality, is not merely an online medium for sharing information about services and products. As a result, it should be seen as a crucial success criterion for them when evaluating Web site quality. Moreover, a deeper investigation of Web quality and its evaluation from the standpoint of e-learners should be conducted in the case of essential education or training services.

**H9:** Web Quality is significantly associated with Intention to Use Cryptocurrency

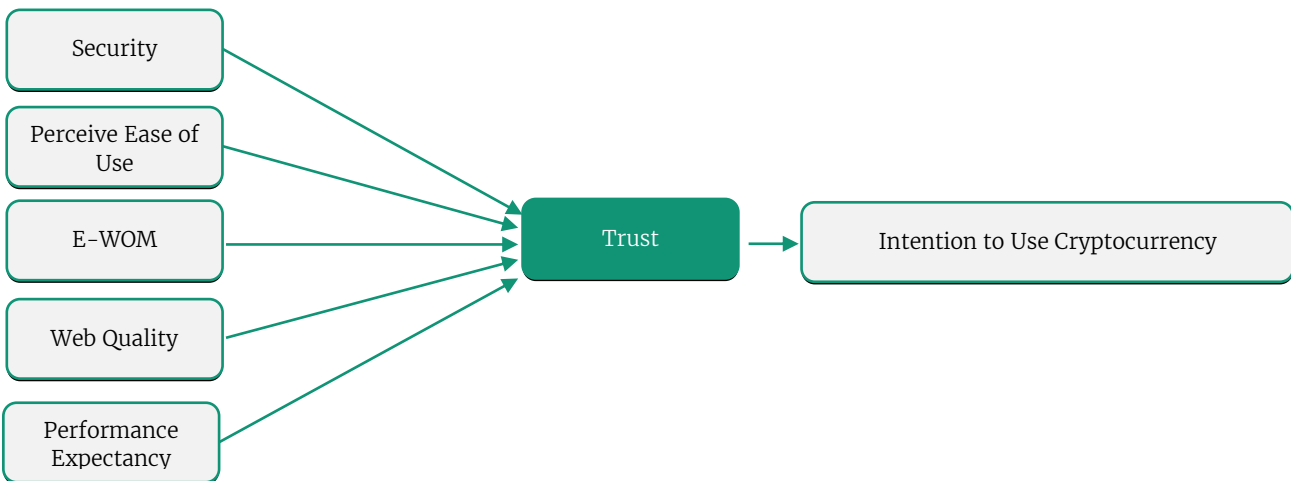


## Relationship between Performance Expectancy and Intention to Use Cryptocurrency

(Farhana & Muthaiyah, 2022) A study was conducted defining how people utilize cryptocurrencies for their advantages; as a result, when cryptocurrency use is seen as advantageous, customers' intention to use it would be a better choice for them. This study focused on the relationship between performance expectancy and behavioral intention to use cryptocurrency as an electronic payment in Malaysia. The results of this study show that there is a positive relationship between performance expectancy and behavioral intention to use cryptocurrency as an electronic payment in Malaysia.

**H10:** Performance Expectancy is significantly associated with Intention to Use Cryptocurrency

### Research Model



## Factors Affecting Intention Behind the Use of Cryptocurrency

### Research Methodology

#### Introduction

The research methodology is explained in this section. Firstly, this methodology chapter consists of the research philosophy, research approach, methodological choices, and research strategy. Then, it explains the data collection method and discusses the instruments and scales used to collect data. In this research, we used the Quantitative Approach.

### Research Methodology

“Methodology is the philosophical framework within which the research is conducted or the foundation upon which the research is based” (Brown, 2006). Research methodology actually describes the methods, approaches, and designs that are used throughout the study to achieve the desired objectives. O’Leary (2004, p.85) describes methodology “as the framework which is associated with a particular set of paradigmatic assumptions that we will use to conduct our research.” The methodology of any research should fulfill the following criteria:

Firstly, the methodology of research should be in accordance with its objectives. Secondly, it could be replicated in other research of the same nature in the future. Detailed discussion and description of research methods used to carry out the current research are given below.

### Research Philosophy

A research philosophy is what the researcher perceives to be truth, reality and knowledge. It outlines the beliefs and values that guide the design of and the collection and analysis of data in a research study, these choices complementing philosophical principles (Ryan, 2018). The positivistic paradigm used in this study was chosen because positivism emphasizes the quantitative verification of pre-existing theories. It emphasizes phenomena' cause-and-effect relationships that may be thought through, acknowledged, and generalized. Both nomothetic and etic perspectives are used. For quantitative research, positivism serves as the main assumption and anchor.



## Research Approach

In this research, we used the inductive approach.

## Methodological Choices

In this research, we used the Quantitative Approach.

## Research Strategy

In this research, we used the survey method to collect data from the two biggest cities of Balochistan, and one is Quetta and the second is Loralai.

## Research Design

The nature of this study is quantitative, finding out the impact of the independent variables on dependent variables with one mediator. The data is collected through a questionnaire.

## Sample Design

### Sampling Techniques

Sampling is defined as the process of selecting a sample from a single or a large number of people for a certain type of research goal (Bhardwaj, 2019). As the size of the sample is less than the whole population, it saves money and time and generates outcomes more swiftly. Sampling works best when there are few assets available. Sampling can be further divided into two categories: probability sampling and Non-probability sampling. When each member of the population has a known likelihood of being chosen for a sample, it is called Probability sampling. When the population is extremely homogeneous, then every member of a population has a good chance of being selected for a sample. Sampling in which it is unknown how likely each member of the population is to be taken for the sample is termed Non-probability sampling. In this study, non-probability sampling was selected, which can be further divided into subcategories. i.e., convenience sampling, purposive sampling, quota sampling, snowball sampling and consecutive sampling. The process of selecting a sample's members on the basis of their easy accessibility is known as convenience sampling. In this study, convenience sampling was used as only those participants who were conveniently available to the researcher to contact were selected for this research.

## Sample Selection

The sample was selected from different users and businesses men, who have knowledge about cryptocurrency.

## Unit of Analysis

Young individuals from the University of Loralai and the University of Balochistan Quetta were the units of analysis for the study. Young individuals of said universities were considered a single unit of analysis. Data was collected for every young individual, and all the responses of those individuals served as an individual data source.

## Population Frame

Data was collected from male and female users. Some of the users were businessmen and students.

## Sample Size

According to Green (1991),  $N \geq 50 + 8p$ , where  $p$  stands for the number of predictors, is an appropriate sample size for a multiple regression. The last sample size needed for this study was 106 because there were seven predictors. However, since it was the minimum, it was believed that a sample size of 220 responders would be easily achievable. The sample size was decreased to 203 after 220 respondents were contacted and the results were finalized.



## Population and Sampling

Data was collected from male and Female students from two different universities, i.e., the University of Loralai, Balochistan and the University of Balochistan Quetta.

## Instrumentation

The instruments for measuring variables were well-defined and have been used in previous studies.

The collection of data was done through a structured questionnaire. Items in the questionnaire were taken from scales or questionnaires used in previous related studies. The overall questionnaire contained 30 items. Security was measured in 3 items. Perceive Eise of Use (PEU) was measured in 5 items. E-WOM was measured in 5 items. Web Quality (WQ) was measured in 3 items. Performance Expectancy (PE) was measured in 3 items. Trust was measured in 6 items. Intention to Use Cryptocurrency (IUC) was measured in 5 items.

An instrument was developed to conduct a survey. There were two parts of the questionnaire; the first part contained the demographic details, and the second part contained constructs measures such as the independent variable (Security, Perceived ease of use, E-WOM, Web Quality, Performance Expectancy) and the dependent variable (Intention to use cryptocurrency) composed from earlier studies. In the current study, data collection was completed by using a five 5-point Likert scale apart from demographic characteristics. The scale was comprised of 5 points containing Strongly Agree-1, Agree-2, Neither Agree Nor Disagree-3, Disagree-4, and Strongly Disagree-5.

## Data Collection Procedure

Data collection is the process of collecting and organizing the statistics needed for upcoming studies. The main goal of data collection is to gather the necessary information for the study and to obtain data for the hypothesis's testing (Saunders et al., 2009). For this study, a questionnaire was developed, and data collecting took place in a staged setting. Data was gathered from the respondents for this study in a staged setting where surveys were conducted before data collection. The questionnaire was developed in the English language. The unit of analysis for all variables was the

## Ethical Requirement

Throughout the data-gathering process, answers from respondents and information were kept confidential.

## Findings and Discussion

**Table 12**

*Summary of findings*

Hypotheses	Description	Remarks
H1	Security is significantly associated with trust.	Accepted
H2	Perceive ease of use is significantly associated with trust.	Accepted
H3	E-WOM is significantly associated with trust.	Accepted
H4	Web quality is significantly associated with trust.	Accepted
H5	Performance expectancy is significantly associated with trust.	Accepted
H6	Security is significantly associated with the intention to use cryptocurrency.	Accepted
H7	Perceived ease of use is significantly associated with the intention to use cryptocurrency.	Accepted
H8	E-WOM is significantly associated with the intention to use cryptocurrency.	Accepted
H9	Web quality is significantly associated with the intention to use cryptocurrency.	Accepted
H10	Performance expectancy is significantly associated with intention to use cryptocurrency.	Accepted
H11	Security is significantly associated with trust.	Accepted

## Study Implications and Future Directions

The results reported in this study have both theoretical and practical implications. This study investigated the relationship between security, perceived ease of use, E-WOM, web quality, performance expectancy, and trust as the mediator with the intention to use cryptocurrency in two different universities in Balochistan.

This study is unique in the sense that intention to use cryptocurrency has been studied earlier, but the behavior

of customers has not been studied with a setting of factors of cryptocurrency majorly, the studies related to cryptocurrency have focused on awareness ([Henry et al., 2019](#)), customer satisfaction and digital business (Chen et al., [2022](#)) but a little work has been done to view how these factors help in developing trust and intention. Towards using cryptocurrency. This study leads to the direction of future studies toward other factors of the consumer behavior model. Like usage behavior and post-usage behavior.

This study will help economists and developers to identify the significance of different factors of cryptocurrency in the development of trust and intention to use cryptocurrency. As trust is the main concern, and if cryptocurrency can be designed, it would be likely to attract more attention toward cryptocurrency.

## Limitation

This study was undertaken by collecting data from young individuals ranging from 25 years to 30 years old. More age ranges can be added to conduct this study in the future. Moreover, this study is limited to studying the intention, which may or may not lead to actual usage behavior; hence, in the future, researchers can add this as the dependent variable in their model.

## Conclusions

This study concludes that cryptocurrency is a new concept that has great importance not only in the field of marketing but also in the field of research, and it is necessary to communicate its aspects in detail for marketers to better understand them and for knowledge development. Trust is also a very important aspect as it contributes immensely and positively to the process of developing intentions to purchase, which ultimately develops consumer behavior. As this study identifies, IUC can be influenced positively by the generation of TRUST. This influence can be generated by introducing new technology to the industry.

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