



Analysis of Motivation Factors in the Adoption of Cryptocurrency Among Micro, Small and Medium Enterprises (MSMEs) in Lusaka

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Abstract

Like many other developing nations, micro, small and medium enterprises (MSMEs) in Lusaka Zambia have not been spared by the fast pace of technology transfer. Adoption of cryptocurrency has been a huge challenge. The digital currency market is in its infancy, which contributes to its high degree of volatility and risk and poor understanding of its use by several sector players. By the end of the year 2020, a new bull run had begun, and the prices of a number of cryptocurrencies had reached all-time highs. In addition to the progressive acceptance and adoption of cryptocurrencies by individuals all over the world, some of the elements that are contributing to the rise of cryptocurrencies include global increase in the rate of inflation. This Survey analysed data from MSMEs domiciled in Lusaka to understand what would motivate them to adopt cryptocurrency. The major drivers were technological awareness, education, facilitating business environment, behavioural intent, social media, performance and effort expectancy

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1. Introduction

Electronic cash was first developed in the 1980s, but it did not get regulatory authority over until 2017. This was due to the general view that this kind of currency was unstable at the time. X. Chen et al (2022). In addition to that, it was developed as a response to the pressure from the market to use this cryptographic technology. Although in most parts of the world, particularly in developed nations, the method of conducting a transaction like this one is regarded as safe, Zambia and a number of other countries in Africa continue to have reservations about it. As a result of the proliferation of cryptocurrencies around the world, financial regulatory agencies in Zambia have been forced to reassess how they exercise control over this sector in an effort to bring about a paradigm shift. In spite of the fact that purchasing or selling cryptocurrency is still in its infancy, the digital markets of the majority of developed countries view it as a reliable kind of cash. Cryptocurrency is a novel financial concept that is built on distributed technology. It has attracted interest from academics, businesses, and people working in a variety of other disciplines. As a result, the findings of the research pointed to the necessity of determining what factors would encourage micro, small, and medium-sized enterprises situated in Lusaka, Zambia to use cryptocurrency. Support from government institutions is essential, despite the fact that there are a number of factors that influence the adoption of cryptocurrencies in the digital market in Zambia.

It is dependent on the attitude of the consumer to adopt digital currency. In addition to this, it is dependent on the expectations of consumers as well as the structure of the consumers themselves. Before cryptocurrencies can function effectively as a medium of trade, it must, just like any other form of currency, be able to efficiently keep its price value. In a similar vein, convenience

and the satisfaction of customers are the means by which to advance digital currencies in the digital market. The transaction's openness to scrutiny is an important component that is relevant to Zambia's digital economy.

1.1 Materials and Methods

Google Forms, survey management software built with the free, web-based Google Docs Editors suite, was used to disseminate and collect primary data from both paper and digital versions of a Questionnaire survey. The study was conducted in Lusaka, Zambia, among 257 micro, small, and medium-sized enterprises (MSMEs), from January to May of 2023. The geographic scope was chosen for Lusaka in a by way of convenient sampling. In this study, demographic variables such as gender, age, industry, years of experience, and education level were taken into consideration. With 59% of the respondents being male and just 41% being female. The data on education was aggregated from non-education, primary education, secondary education, and tertiary education, with the phrase "tertiary education" indicating that the respondent had attended either a university or a higher professional school. The majority of the respondents had between 3 and 5 years of work experience, were over the age of 40, had tertiary education, and operated as general dealers when the data was being gathered. The IBM SPSS Statistics Version 24 and Excel was utilised in the process of performing the statistical analysis on the primary data that was gathered. When analysing the relationships between two variables, contingency table analyses were carried out. Within the scope of the study that will be discussed further down, the authors did not differentiate between the two primary classifications of cryptocurrencies, namely coins and tokens. All of them were categorised as cryptocurrencies collectively. The survey inquired mostly about the following four categories: (a) The preparedness of micro, small, and medium-sized enterprises (MSMEs) about their willingness to take risks when using bitcoin; (b) The ease of use of cryptocurrency platforms; (c) Financial literacy and education; and (d) What would drive them to embrace or utilise cryptocurrency. The many questions, as well as the criteria that was used to evaluate them, are described into further depth below.

1.2 Results and Discussion

The findings of this study are discussed in detail below in line with study aim and objectives.

Figure 1.1 above illustrates the distribution of financial and regulatory factors which favor or drive adoption of cryptocurrencies in Zambia. This was in line or in order to address one of the objectives of the research. It was asked of the respondents what financial and regulatory issues they believed supported or perceived to be a mediating or driving factors influencing the adoption of cryptocurrencies in Zambia. Following this inquiry, the majority of the respondents polled, which accounted for 21% (54/257), stated that technological awareness/network readiness was the major driving force in adoption of cryptocurrency among MSMEs in Zambia. On the other hand, the least considered key driver was effort expectancy, enhanced awareness, and performance expectancy, which stood at 5% (15/257), while others (Specify) polled 2% (3/257). Education came in second at 16.2% (43/257), followed by an favorable legal environment and supportive government regulations and policies at 15.6% (40/257), behavioural intent at 12%

(31/257), social media at 8.9% (23/257), conducive economic conditions at 8.2% (21/257), performance expectation at 5.8% (15/257), enhanced awareness at 5.8% (15/257), effort expectancy at 5.8% (15/257), and others (specify) at 2% (3/257).

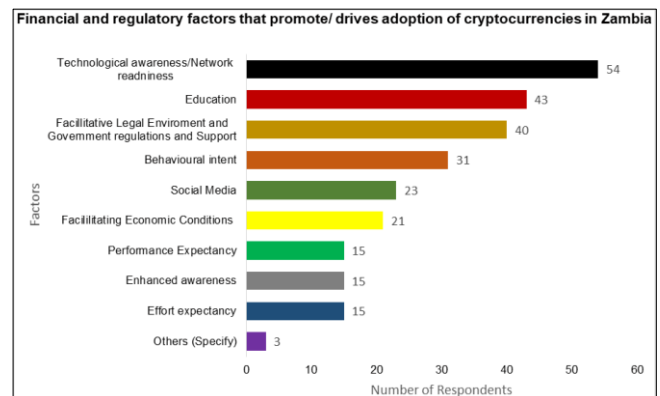


Fig 1.1: Showing distribution of Financial and regulatory factors that promote/ drives adoption of cryptocurrencies in Zambia

1.2.1 Technological awareness/network readiness as a key driver to cryptocurrency adoption

The network readiness index, sometimes known as network preparedness is a predisposition to capitalize on the possibilities presented by information and communications technology as an essential component that aids in the adoption of cryptocurrencies. Because the blockchain technology that is used to permit, approve, and record bitcoin transactions is the foundation upon which the cryptocurrency business is built, it is essential for a country to have technical skills and an internet infrastructure that are both highly developed and very efficient. Despite the fact that very little is known about where this technology came from, it was introduced to the world in 2009 by Satoshi Nakamoto.

The purpose of this technology is to make it feasible for two people to transmit money to one another through an encrypted network without either of them having to expose their identities. A verification of the transaction by a separate party is not required since it is not necessary. It is possible to draw the conclusion that these technologies have consistently shown robust performance ever since their inception. Even if Bitcoin's price has been going down lately after being on an upward trend for quite some time, the fact that many other cryptocurrencies have arisen as viable alternatives demonstrates how successful the digital currency market has been. It is for this reason that the significance of being technologically literate and having a well-prepared network cannot be overstated. The results presented here have a good deal of resonance with the Unified Theory of Acceptance and Use of Technology (UTAUT) that was discussed in the section of this research that looked at the literature review.

1.2.2 Education as a key driver to cryptocurrency adoption

Despite the fact that cryptocurrency has been around for more than a decade at this point, most people still have a limited knowledge of it. There are still a lot of people who think of it as a difficult and risky investment, not realising that it has the potential to become a game-changing technology that might alter the way that we conduct transactions and secure money. The fact of the matter is that education and awareness are

very important factors that drive both the acceptance of digital currencies and its value. When it comes to teaching the general public about cryptocurrencies, educational institutions of all levels—from elementary schools to universities—play an essential part. Students will have a better understanding of the technology and its potential uses if educational institutions begin to teach about cryptocurrencies as part of their standard curricula. This may assist in the development of a new generation of knowledgeable and astute investors who are aware of the opportunities presented by cryptocurrencies.

Professionals who are interested in gaining a deeper understanding of the technology may also take advantage of the educational opportunities that educational institutions may provide in the form of cryptocurrency-related classes and internships. Professionals in the fields of finance, law, and other fields may use this to their advantage in order to keep abreast of the most recent advancements in blockchain technology and cryptocurrencies.

The obstacles that stand in the way of widespread use of cryptocurrencies may be overcome via education. Education can assist the general public in comprehending the value of cryptocurrency and its potential to revolutionise the manner in which we carry out transactions by educating them on the advantages and possibilities of cryptocurrency. Education may also assist in dispelling myths and misunderstandings around bitcoin, such as the notion that it is associated with fraudulent activity and illicit activities.

1.2.3 Facilitative Legal Environment and Government regulations and Support as a key driver to cryptocurrency adoption

Adoption of digital currencies may be hindered by the absence of enabling legal frameworks as well as legislation that allow the use of cryptocurrencies as a form of legal tender. According to Khan et al. 2020, government support is a legislative framework designed to ensure that service providers meet their commitments in accordance with the specified legal framework and to guarantee that customers are protected from online scams, fraud, and other infractions. The same is true for cryptocurrencies that are based on blockchain technology; having government endorsement is required in order to lessen the uncertainty around their adoption (San Martin and Camarero, 2009). Instructions from the government and the implementation of new technologies. According to Alaklabi and Kang's research from 2021, the presence of government backing reduces the consumer's behavioural desire to use cryptocurrencies. Even if we are aware that using technology might benefit and improve productivity, it is vital to allow and manage the application of new technologies (McCloskey, 2007). Even if customers do not grasp and comprehend the intricacy of the new technology and how it may be used, the backing of the government can help mediate the link between technological awareness and the consumers' behavioural intention. In spite of this, people will comprehend it and apply it since it offers legal protection. According to Khan et al. 2020, government support is a legislative framework designed to ensure that service providers meet their commitments in accordance with the specified legal framework and to guarantee that customers are protected from online scams, fraud, and other infractions. The same is true for cryptocurrencies that are based on blockchain technology; having government endorsement is required in order to lessen the uncertainty

around their adoption (San Martin and Camarero, 2009) and instructions from the government and the implementation of new technologies. According to Alaklabi and Kang's research from 2021, the presence of government backing reduces the consumer's behavioural desire to use cryptocurrencies. Even if we are aware that using technology might benefit and improve productivity, it is vital to allow and manage the application of new technologies (McCloskey, 2007). Even if customers do not grasp and comprehend the intricacy of the new technology and how it may be used, the backing of the government can help mediate the link between technological awareness and the consumers' behavioural intention. In spite of this, people will comprehend it and apply it since it offers legal protection.

Every nation's government governs the business sector in accordance with the objectives that it has established. The government of a nation is responsible for formulating the country's legal system. The laws that have been enacted by the government for the running of businesses are referred to as the "legal environment." The operations of businesses are subject to the oversight of the government in every nation. The term "legal environment" refers to these restrictions brought forth by the government. In actuality, adherence to legal standards and regulatory requirements work hand in hand. The regulatory environment, which is synonymous with the term legal environment, is the one that establishes the boundaries for the activities of businesses.

The political and social climate of a nation has a significant impact on the kinds of choices that may be made by organisations. Take for instance the digital currency market: with no supporting activities currently in place, it is very difficult for digital money to be embraced in a timely manner. Because the government has a significant impact on all company policies, the organisation should have a comprehensive understanding of these policies. This is because failing to adopt legal rules may result in severe fines, penalties, and other forms of punishment; as a consequence, every organisation is required to comply with all of these laws. In Zambia, it would be desirable to see a major shift in policy that encourages the use of cryptocurrencies.

1.2.4 Behavioural intent as a key driver to cryptocurrency adoption

The term "behavioural intention" refers to the motivating variables that drive a certain conduct by an individual, such that the greater the strength of the intention to execute the behaviour, the greater the likelihood that the behaviour will be completed. Subjective norms are the beliefs that the majority of people either approve of the behaviour or disapprove of the behaviour. Intentions are the most immediate factor in determining whether or not an individual would freely behave in a given manner, and these intentions may vary greatly from person to person. For instance, in order to get someone to meditate, you will, at the very least, need them to have the intention of doing so this is more true if an individual would adopt say for example using cryptocurrency. Defining what determines behavioural intentions is consequently one of the most important issues in the field of persuasion. The Theory of Reasoned Action and its extension, the Theory of Planned Behaviour, are both popular theories of persuasion that explain what factors predict behavioural intentions. It is possible to have an effect on a person's behavioural intention, which is defined as "the person's subjective probability that he or she will perform the

behaviour in question." It seems to imply that the behavioural desire to use blockchain technology is connected with factors like perceived risk, perceived value, and personal innovativeness. Customers' behavioural intentions may be quantified in terms of their propensity to engage in financial transactions within the setting of bitcoin or other related non fiat currencies. Awareness of technology and behavioural attitude are essential predictors of cryptocurrency adoption based on the theories above. Intention is often regarded as the most important aspect in influencing how quickly a technology is adopted. Because of the rapidly expanding usage of cryptocurrencies, this is a subject that is covered in great depth by many different categories. Nonetheless, it has amassed a significant amount of popularity and emerged as a topic of debate for a wide variety of new media, particularly monetary ones. However, the acceptance of this money and the number of transactions conducted with it are much below the level that was anticipated this scenario prompts a search for reasons why consumers are afraid to utilise virtual currencies and why the majority of individuals depend on conventional payment methods despite the fact that these methods carry a higher level of risk.

According to the Theory of Planned Behaviour, an individual's intentions and their sense of how much control they have over their behaviour significantly influence the behaviour that they exhibit. The amount to which a person feels that they have control over completing a certain behaviour is referred to as their perceived behavioural control. This concept is also known as self-efficacy. To flip things around, intentions may be directly anticipated by (1) an individual's attitude towards the conduct, (2) subjective norms, and (3) Perceived behavioural control. The acceptability of cryptocurrencies is contingent on the behavioural intentions of customers or investors. It comprises their conviction that the technology will assist them in improving their performance, that it will be simple for them to use, and that it will pose a minimal risk to them. (Khan et al., 2021). The findings of this study mirrors very well with those of Theory of reasoned action (TRA) and planned behavioural theory.

1.2.5 Social Media as a key driver to cryptocurrency adoption

The term "social media" refers to the many methods through which individuals may connect with one another to produce, share, and/or trade information and ideas inside online groups and networks. The Office of Communications and Marketing is responsible for managing the primary social media platforms, including Facebook, Twitter, Instagram, LinkedIn, image-based websites, video sharing and streaming platforms, discussion forums, blogs, and community platforms, as well as Key Takeaways, among other things. According to the findings of this research, the use of cryptocurrencies is significantly influenced by social media platforms. Additionally, news may be disseminated using social media. The price of cryptocurrency may be affected by articles that are currently trending regarding significant developments in the cryptocurrency industry. The hacking of Bitfinex, a cryptocurrency exchange with headquarters in Hong Kong, caused a precipitous 20% decline in the price of bitcoin. It is possible that social media may have a beneficial impact on cryptocurrencies, but it is also possible that it will have a negative impact, leading to significant price increases or decreases. Cryptocurrency has the potential to provide

certain society advantages, such as financial inclusivity and the option to "be your own bank," but it also has the potential to present some societal drawbacks, such as its carbon footprint, the prevalence of theft via hacks, and the absence of centralised oversight. When individuals want to know the most recent information on cryptocurrencies, the first place that many of them look is on social media. When they are interested in finding out what people are talking about and what the next big thing is going to be, even experienced journalists will visit websites such as Reddit. Twitter, YouTube, Telegram, Discord, and Reddit are the most popular sites for advertising crypto businesses forums are the origin of many hot topics involving cryptocurrency. These threads are then picked up by other newspapers and disseminated across other social media channels.

There is little doubt that cryptocurrencies will continue to have a tight relationship with social media. People will speak about what is going on in the realm of cryptocurrency on social media, and cryptocurrency will be impacted by what people talk about on social media.

1.2.6 Facilitating Economic Conditions as a key driver to cryptocurrency adoption

The current status of an economy in a particular nation or area is referred to as its economic conditions. The status of macroeconomic variables and trends in a nation at a given moment in time is what analysts mean when they talk about the economic conditions of that nation.

The potential growth of GDP, the rate of unemployment, inflation, and the orientations of fiscal and monetary policy, as well as the consumer confidence index, are all examples of such scenarios. As time passes, these variables shift in tandem with the ebb and flow of economic and business cycles. This is because an economy is always going through phases of growth and contraction. All of these factors play a significant part in determining the rate at which cryptocurrencies are adopted in a specific country. Economic circumstances are seen as being healthy or favourable when an economy is growing, while they are regarded as being unfavourable or detrimental when an economy is declining. Government support is a legal framework designed to govern that service providers meet their commitments within the defined legal framework and to guarantee that customers are protected from online scams, fraud, and other breaches. Numerous macroeconomic and microeconomic elements, including as monetary policy and fiscal policy, the status of the global economy, unemployment levels, productivity, exchange rates, inflation, and a great number of other factors, all have an impact on the economic circumstances of a nation as it strive to adopt cryptocurrency. The same is true for cryptocurrencies that are based on blockchain technology; having approval from the government is required in order to lessen the uncertainty around their adoption (San Martin and Camarero, 2009). Customers' behavioural intentions towards adopting new technology might be influenced by the rules and regulations imposed by the government. According to Alaklabi and Kang's research from 2021, the presence of government backing reduces the consumer's behavioural desire to use cryptocurrencies. Even if we are aware that using technology might benefit and improve productivity, it is vital to allow and manage the application of new technologies (McCloskey, 2007). Even if customers do not grasp and comprehend the intricacy of the new technology and how it may be used, the backing of the government can

help mediate the link between technological awareness and the consumers' behavioural intention. Nevertheless, due to the assurance of legal protection, they will comprehend it and apply it (Granić and Marangunić, 2019). Even if customers discovered that using the digital currency as a means of exchange is a straightforward and uncomplicated process, the assistance that the government provides influences the behaviour of customers towards cryptocurrencies (San Martín and Camarero, 2009). According to Uematsu and Tanaka (2019), it could be helpful in increasing both the acceptance of new technologies and confidence in using them. When consumers perceive that the government is on their side, their intention to engage in risk-reducing behaviours is more likely to materialise. Customers' readiness to embrace new technologies guarantees that customers will adopt them if their usage is impacted by government support and instructions (Khan et al., 2020). This is because government backing plays a vital part in consumers' decision to use cryptocurrencies. It has the ability to mediate the link between technological awareness and behavioural intention, so minimising the degree of ambiguity and the possible bad impacts of using technology even if users do not fully appreciate and understand it due to concerns about legal security. They will make an effort towards comprehending and incorporating it into their lives. It is essential for governments to provide assistance in the form of rules and regulations in order to minimise the potential downsides of using cryptocurrencies as a means of exchange. (Albayati et al., 2020). Previous studies have shown that due to the decentralised structure of cryptocurrencies, there is a significant level of danger that is believed to be linked with them. Nevertheless, if the government backs it and establishes a legal framework for it, consumer behaviour intentions will shift towards this new medium of exchange. (Mutahar et al., 2018). The key element that directly affects both technological awareness and behavioural intention to use digital currency as a medium of exchange is risk. Risk is the primary factor that directly affects technology awareness. Nevertheless, the presence of official assistance has the potential to favourably attenuate the impact, as customers will believe more in the legality and security of the product (Sagheer, N., et al 2022).

1.2.7 Performance Expectancy as a key driver to cryptocurrency adoption

The term "performance expectancy" refers to the perception that the use of a certain technology or approach would, in some way, be beneficial or performance enhancing to the person. Additionally, performance expectancy may be seen as the degree to which an individual feels that using the system will assist him or her in achieving increases in work performance. The Unified Theory of Acceptance and Use of Technology (UTAUT) was developed by Venkatesh, Morris, Davis, and Davis (2003) to predict user acceptance and subsequent usage of a system or information technology. The UTAUT includes three constructs: performance expectancy (PE), effort expectancy (EE), and facilitating conditions (FC). Performance expectancy is one of the constructs of the Unified Theory of Acceptance and Usage of Technology (UTAUT) model that has received considerable attention from several researchers in different fields of human endeavors including cryptocurrency adoption (Bugembe, 2010; Khayati & Zouaoui, 2013; Tossy, 2014; Venkatesh et al. 2003). Researchers have come from a variety

of fields, including medicine, business, and education that have given backing to such exhibited behaviour by individuals. According to the findings of the current study, performance expectation is a crucial construct that plays a role in determining the adoption and, ultimately, the use of information systems especially digital currencies. Indicators such as perceived usefulness, intrinsic and extrinsic motivation, job-fit, relative advantage, and result expectations of the Information Technology are major contributors to the determination of what constitutes a reasonable performance expectation. Because PE is expected to have such a large influence on the widespread usage of cryptocurrency as a form of digital payment, the architecture of cryptocurrency digital systems must ensure that they are always helpful to consumers if the cryptocurrency is to be widely used. The ability of digital currency payment to maintain time-saving features, decrease transaction costs, the non-physical presence of traders to complete transactions, and provide flexibility in payment (anywhere) are significant performance expectation components that entice consumers to use this payment system. The result of this study is consistent with the findings of previous research studies, which have shown that this factor has a significant role in accelerating the adoption of cryptocurrencies as a payment mechanism for products and services. The findings of this study are anchored on Unified Theory of Acceptance and Use of Technology (UTAUT) which investigates how the influences of performance expectation, effort expectancy influence individual decision to use a specific technology such as Bitcoin.

1.2.8 Enhanced awareness as a key driver to cryptocurrency adoption

Enhanced awareness is critical for any technology to be embraced, primarily also the public must trust such technology and more especially for cryptocurrency where individuals or companies have to risk their investments using not fiat type of currencies. A study by Doblas (2019) sought to ascertain college students' level of awareness and attitude toward cryptocurrencies and how these factors may influence their final decision to use the technology. Numerous inferences were drawn as a result of the research. To begin, the percentage of customers who are extremely aware of cryptocurrencies leaves a lot to be desired. Second, while bitcoin is perceived favorably as a possible means of exchange, there is still much doubt over its suitability as an investment instrument, particularly because of its volatility and individual's attitude toward cryptocurrencies and level of awareness has a major impact on their propensity to accept Cryptocurrency. . The findings of this study aligns well with the Diffusion of innovation theory and Trust transfer theory expounded in the second chapter of this thesis.

1.2.9 Effort expectancy as a key driver to cryptocurrency adoption

The amount of ease and usability that individuals experience while using a particular information system is referred to as effort expectancy. Effort expectancy may also refer to the degree of simplicity connected with the usage of a system or a process. This is founded on the concept that there are connections between the amount of effort that is expended at work, the level of performance that is attained as a result of that effort, and the rewards that are obtained as a result of that effort. According to the findings of the present research,

"effort expectancy" may be operationalized as "the convenience and usability that customers perceive when using cryptocurrencies." The amount of convenience that is linked with the use of a certain information technology is represented by the "effort expectancy," which is another component of the UTAUT model. According to Venkatesh et al. (2003), effort expectation refers to the degree of convenience that is linked with the use of an information system. It indicates the amount of anticipation that a customer using digital currency platforms would experience terms of ease of use and would not be characterised by efforts that are both physically and mentally taxing when using such technology. The notion that there are correlations between the amount of effort put forth at work, the performance that is accomplished as a result of that effort, and the rewards that are obtained as a result of that effort is the foundation for the concept of effort expectation. (Ghalandari, 2012).

The use of digital currency platforms for the purpose of online transaction by a customer is directly related to the effort expectation that the client has. This is due to the fact that the ease with which customer may obtain pertinent information using these cryptocurrency platforms in the lowest amount of time feasible is likely to have a significant impact on whether or not they choose to utilise such technology. Therefore, customers using Bitcoin and other digital currencies may not feel the need to avoid utilising such a platform if they discover that it is quite simple to use their online transaction purpose.

In addition, the concept of enabling conditions as it is used in UTAUT relates to the degree to which a person believes that the necessary organisational and technological infrastructures to make use of the planned system are now present. . The presence of certain characteristics, known as "facilitating conditions," in a setting is what makes it feasible for customers using digital currency platforms to utilise this service to the fullest. Indicators such as perceived behavioural control and compatibility play a big role in determining the situations that are conducive to facilitation of use and adoption of cryptocurrency. Ability or capacity to make efficient use of digital currency platforms is contingent on the availability of organisational resources (human and material) as well as the proper technological infrastructure needed for the devices to operate at their highest levels of efficiency. This suggests that the degree to which customers using digital currency platforms feel that organisational resources and technological infrastructure exist to enable the successful use such technologies may influence whether or not they will actually use and adopt cryptocurrencies or not. In other words, whether a customer uses such platforms could be determined by the degree to which they believe that such resources and infrastructure exist.

2. Theoretical implication

This study's main goal or aim was to determine the predictors or factors that influence micro and small medium enterprises in the adoption/acceptance of cryptocurrencies usage in Lusaka Zambia. In doing so, it will enable present and potential market participants to analyse the fundamental features of the cryptocurrency. This elucidates the role that perceived considerations (such as utility, convenience of use, and risk) play in bridging the gap between technological awareness and behavioural intentions. In this manner, it contributes to the body of knowledge that already exists concerning the factors that might be used to anticipate the

adoption of digital currency. In addition, it underlines the intervening function of government assistance through a moderated mediation model, which can assist the sector in better comprehending the significance of legal rules and government support in increasing the behavioural intents of users. Both in the present and in the future.

2.1 Practical Implications

This current study has advanced new knowledge to the Banking sector, real estate, online wholesale and retail etc. and suggests that the main factors driving the adoption decision revealed from the study are the investment opportunity cryptocurrency brings about as well as the freedom of the anonymity of the transactions and privacy, the acceptance by business. Previous studies only looked at a single unit of cryptocurrency impact such as Taxation Compliance or regulation. But a more practical attention that is urgent is to review financial regulatory statutes that are at variance or impede cryptocurrency adoption in Zambia. These statutes include the Bank of Zambia Act No. 5 of 2022, which needs to be realigned and respond to global financial innovativeness; the National Financial Inclusion Strategy (2017–2022), which also needs to be realigned; The Public Finance Management ACT 2018, which also needs to be realigned; and the Money Laundering Act No. 14 of 2001.

3. Limitations of the Study

The fact that this study only surveyed MSMEs located in Lusaka is a significant limitation of the study's respondent population because Lusaka is an urban area and may have led to capturing data to respondents who were well-informed, which may have led to results being skewed. Consideration should be given to using a combination of qualitative and quantitative research approaches for future studies, the sample size was not sufficient; hence, future research could benefit from a larger sample size in order to generalise the findings. Randomization of future study populations should be considered rather than purposeful or convenient sampling. In addition, our ability to draw causal conclusions is hindered by the cross-sectional design, which leads us to believe that prospective studies would be strengthened by adopting a longitudinal methodology while bearing in mind that there may be individual differences in adoption process.

4. Conclusion

The major drivers were technological awareness, education, facilitating business environment, behavioural intent, social media, performance and effort expectancy. The aforementioned findings contribute to The Unified Theory of Acceptance and Use of Technology (UTAUT), which investigates the acceptance of technology, which is determined by the effects of performance expectancy, effort expectancy, social influence, and facilitating conditions in which respondents perceived appropriate adoption (AD) practices act as the catalyst to adopt or not to use cryptocurrency.

5. References

1. Abbad MM. Using the UTAUT model to understand students' usage of e-learning systems in developing countries. *Education and Information Technologies*. 2021; 26(6):pp.7205-7224.
2. Abbasi GA, Tiew LY, Tang J, Goh YN, Thurasamy R. The adoption of cryptocurrency as a disruptive force:

- Deep learning-based dual stage structural equation modelling and artificial neural network analysis. *Plos one*. 2021; 16(3):p.e0247582.
3. Abdullah SM. Similiarity Artikel: Social Cognitive Theory: A Bandura Thought Review published in 1982-2012. *Journal Psikodimensia*. 2019; 18(1):85-100.
 4. Acampora A, Lucchetti MC, Merli R, Ali F. The theoretical development and research methodology in green hotels research: A systematic literature review. *Journal of Hospitality and Tourism Management*. 2022; 51:pp.512-528.
 5. Adam AM. A study on sample size determination in survey research. *New Ideas Concerning Science and Technology*. . 2021; 4, pp.125-134.
 6. Ambong RMA, Paulino MA. Analyzing rice farmers' intention to adopt modern rice technologies using technology acceptance model (TAM). *Asian Research Journal of Agriculture*. 2020; 13(1):pp.21-30.
 7. Amores-Sesar I, Cachin C, Mičić J. Security analysis of ripple consensus, 2020, arXiv preprint arXiv:2011.14816.
 8. Ante L. The non-fungible token (NFT) market and its relationship with Bitcoin and Ethereum. *FinTech*. 2022; 1(3):pp.216-224.
 9. Ante L. Cryptocurrencies. In *The Emerald Handbook on Cryptoassets: Investment Opportunities and Challenges*, 2023, (pp. 45-60). Emerald Publishing Limited.
 10. Antonopoulos AM. *Mastering Bitcoin: Programming the open blockchain*. " O'Reilly Media, Inc, 2017.
 11. Antonopoulos AM. *Mastering bitcoin*. O'Reilly Media, 2019.
 12. Arias MA, Shin Y. There are two sides to every coin—even to the bitcoin, a virtual currency. *The Regional Economist*, 2013.
 13. Arias-Oliva M, Pelegrín-Borondo J, Matías-Clavero G. Variables influencing cryptocurrency use: a technology acceptance model in Spain. *Frontiers in psychology*. 2019; 10:p.475.
 14. Armknecht F, Karame GO, Mandal A, Youssef F, Zenner E. Ripple: Overview and outlook. In *Trust and Trustworthy Computing: 8th International Conference, TRUST 2015, Heraklion, Greece, August 24-26, 2015, Proceedings*. 2015; 8: (pp. 163-180). Springer International Publishing.
 15. Aziz ATIF. Cryptocurrency: Evolution & legal dimension. *International Journal of Business, Economics and Law*. 2019; 18(4):pp.31-33.
 16. Baker HK, Nofsinger JR, Puttonen V. Other Frauds and Scams that Lure Unsuspecting Investors. In *The Savvy Investor's Guide to Avoiding Pitfalls, Frauds, and Scams*, 2020, (pp. 149-177). Emerald Publishing Limited.
 17. Bamufleh D, Alshamari AS, Alsobhi AS, Ezzi HH, Alruhaili WS. Exploring public attitudes toward e-government health applications used during the COVID-19 pandemic: Evidence from Saudi Arabia. *Computer and Information Science*. 2021; 14(3):1-24.
 18. Bhaskar ND, Chuen DLK. Bitcoin mining technology. In *Handbook of digital currency* (pp. 45-65). Academic Press, 2015.
 19. Bhattacharjee A, Chaudhary M, Ranganathan S. Adoption of Value-Based Pricing for Prescription Drugs: An Extension of Roger's Innovation Diffusion Theory. *International Journal of Health Sciences*. 2022; 6:5347-5364.
 20. Bhattacharyya DK. *Research methodology*. Excel Books India, 2009.
 21. Bradt J, Burns DS, Creswell JW. Mixed methods research in music therapy research. *Journal of music therapy*. 2013; 50(2):pp.123-148.
 22. Brunnermeier MK, James H, Landau JP. The digitalization of money (No. w26300). National Bureau of Economic Research, 2019.
 23. Burns S. The Silicon Savannah: exploring the promise of cryptocurrency in Africa. In *The Economics of Blockchain and Cryptocurrency*, 2022, 69-94. Edward Elgar Publishing.
 24. Burns S. The Silicon Savannah: exploring the promise of cryptocurrency in Africa. In *The Economics of Blockchain and Cryptocurrency* (pp. 69-94). Edward Elgar Publishing, 2022.
 25. Busayatananphon C, Boonchieng E. January. Financial technology DeFi protocol: A review. In *2022 Joint International Conference on Digital Arts, Media and Technology with ECTI Northern Section Conference on Electrical, Electronics, Computer and Telecommunications Engineering (ECTI DAMT & NCON)* (pp. 267-272). IEEE, 2022.
 26. Buterin V. A next-generation smart contract and decentralized application platform. white paper. 2014; 3(37):pp.2-1.
 27. Caporale GM, Kang WY, Spagnolo F, Spagnolo N. Non-linearities, cyber attacks and cryptocurrencies. *Finance Research Letters*. 2020; 32:101297.
 28. Carroll JM, Bellotti V. February. Creating value together: The emerging design space of peer-to-peer currency and exchange. In *Proceedings of the 18th ACM Conference on Computer Supported Cooperative Work & Social Computing*. 2015, 1500-1510.
 29. Catania L, Grassi S. Forecasting cryptocurrency volatility. *International Journal of Forecasting*. 2022; 38(3):pp.878-894.
 30. Cermak V. Can Bitcoin Become a Viable Alternative to Fiat Currencies? An empirical analysis of Bitcoin's volatility based on a GARCH model. *An Empirical Analysis of Bitcoin's Volatility Based on a GARCH Model*, 2017.
 31. Champagne P. *The book of Satoshi: The collected writings of Bitcoin creator Satoshi Nakamoto*, 2014.
 32. Champagne P. *The book of Satoshi: The collected writings of Bitcoin creator Satoshi Nakamoto*, 2014.
 33. Champagne P. *The book of Satoshi: The collected writings of Bitcoin creator Satoshi Nakamoto*, 2014.
 34. Chan W, Olmsted A. December. Ethereum transaction graph analysis. In *2017 12th international conference for internet technology and secured transactions (ICITST)*, 2017, (pp. 498-500). IEEE.
 35. Chang TH, Svetinovic D. Improving bitcoin ownership identification using transaction patterns analysis. *IEEE Transactions on Systems, Man, and Cybernetics: Systems*. 2018; 50(1):pp.9-20.
 36. Chao CM. Factors determining the behavioral intention to use mobile learning: An application and extension of the UTAUT model. *Frontiers in psychology*. 2019; 10:1652.
 37. Daniel PS, Sam AG. *Research methodology*. Gyan Publishing House, 2011.
 38. Dawadi S, Shrestha S, Giri RA. *Mixed-methods*

- research: A discussion on its types, challenges, and criticisms. *Journal of Practical Studies in Education*. 2021; 2(2):pp.25-36.
39. De Koker L. The 2012 revised FATF recommendations: Assessing and mitigating mobile money integrity risks within the new standards framework. *Washington Journal of Law, Technology & Arts*. 2013; 8(3):p.165.
 40. De Vries A. Bitcoin's energy consumption is underestimated: A market dynamics approach. *Energy Research & Social Science*. 2020; 70:p.101721.
 41. Değerli A, Aytekin Ç, Değerli B. Analyzing information technology status and networked readiness index in context of diffusion of innovations theory. *Procedia-Social and Behavioral Sciences*. 2015; 3;195:1553-62.
 42. Fairfield JA. Smart contracts, Bitcoin bots, and consumer protection. *Wash. & Lee L. Rev. Online*. 2014; 71:35.
 43. Fan L. Mobile investment technology adoption among investors. *International Journal of Bank Marketing*. 2022; 40(1):50-67.
 44. Fang T, Su Z, Yin L. Economic fundamentals or investor perceptions? The role of uncertainty in predicting long-term cryptocurrency volatility. *International Review of Financial Analysis*. 2020; 71:101566.
 45. Fayad R, Paper D. The technology acceptance model e-commerce extension: a conceptual framework. *Procedia economics and finance*. 2015; 26:1000-1006.
 46. Goddard W, Melville S. *Research methodology: An introduction*. Juta and Company Ltd, 2004.
 47. Greenland S, Senn SJ, Rothman KJ, Carlin JB, Poole C, Goodman SN, Altman DG. Statistical tests, P values, confidence intervals, and power: a guide to misinterpretations. *European journal of epidemiology*. 2016; 31:337-350.
 48. Grinberg R. Bitcoin: An innovative alternative digital currency *Hastings Science & Technology Law Journal*. 2011; 4:160.
 49. Grobys K, Huynh TLD. When Tether Says "JUMP!" Bitcoin Asks "How Low?". *Finance Research Letters*. 2022; 47:p.102644.
 50. Gunay S. Impact of public information arrivals on cryptocurrency market: A case of twitter posts on ripple. *East Asian Economic Review*. 2019; 23(2):149-168.
 51. Gunay S. Impact of public information arrivals on cryptocurrency market: A case of twitter posts on ripple. *East Asian Economic Review*. 2019; 23(2):149-168.
 52. Gupta A, Gupta N. *Research methodology*. SBPD Publications, 2022.
 53. Gupta S, Sadoghi M. Blockchain transaction processing, 2021, arXiv preprint arXiv:2107.11592.
 54. Haile L. Factors Affecting the Adoption of Mobile Banking in Commercial Bank of Ethiopia (Doctoral dissertation, St. Mary's University), 2015.
 55. Halcomb EJ, Hickman L. *Mixed methods research*, 2015.
 56. Hamayel MJ, Owda AY. A novel cryptocurrency price prediction model using GRU, LSTM and bi-LSTM machine learning algorithms. 2021; *AI*, 2(4):477-496.
 57. Hu K, Zhang Z. Fast lottery-based micropayments for decentralized currencies. In *Information Security and Privacy: 23rd Australasian Conference, ACISP 2018, Wollongong, NSW, Australia, July 11-13, 2018, Proceedings 23* (pp. 669-686). Springer International Publishing, 2018.
 58. Hughes AS. *Mixed methods research*. APS Observer, 2016, 29.
 59. Iansiti M, Lakhani KR. The truth about blockchain. *Harvard business review*. 2017; 95(1):18-127.
 60. Jegerson D, Khan M, Mertzanis C. Adoption of cryptocurrencies for remittances in the UAE: the mediation effect of consumer innovation. *European Journal of Innovation Management*, 2023.
 61. Kaponda K. *An Interrogation into the Regulatory Challenges of Virtual Currencies on the Zambian Economy*, 2019, Available at SSRN 3509503.
 62. Kaponda K. *An investigation into the state of cryptocurrencies and regulatory challenges in Zambia*, 2019, Available at SSRN 3433153.
 63. Kaponda K, Mungule OK, Mwange A. *The Cost of Cash Processing as a Determinant of the Central Bank Digital Currency: A Critical Analysis of The Zambian Case*, 2022.
 64. Kaushal PK, Bagga A, Sobti R. Evolution of bitcoin and security risk in bitcoin wallets. In *International Conference on Computer, Communications and Electronics (Comptelix)*, 2017, pp. 172-177. IEEE.
 65. Kaushal PK, Bagga A, Sobti R. Evolution of bitcoin and security risk in bitcoin wallets. In *2017 International Conference on Computer, Communications and Electronics (Comptelix)*, 2017, (pp. 172-177). IEEE.
 66. Kaya Soyulu P, Okur M, Çatıkkaş Ö, Altıntig ZA. Long memory in the volatility of selected cryptocurrencies: Bitcoin, Ethereum and Ripple. *Journal of Risk and Financial Management*. 2020; 13(6):p.107.
 67. Küfeoğlu S, Özkuran M. Bitcoin mining: A global review of energy and power demand. *Energy Research & Social Science*. 2019; 58:p.101273.
 68. Lee JW. Diffusion of innovations. In *Encyclopedia of Sport Management*. Edward Elgar Publishing, 2021, (pp. 137-138).
 69. Lemieux P. Who is satoshi nakamoto. *Regulation*. 2013; 36(3):pp.14-15.
 70. Abah AE, Awi-Waadu GDB, Nduka FO, Richard A. Malaria infection and socio-economic status of some residents of Port Harcourt metropolis, Rivers State, Nigeria. *Journal of Applied Science and Environmental Management*. 2017; 21(2):299-304.
 71. Abanobi OC. *Core concepts in epidemiology and public health practice, Quick reference: Opinion research communication*, Owerri, Abanaheart publication, 2010, 160-163.
 72. Asenso-Okyere WK, Dzator JA. Household cost of seeking malaria care. A retrospective study of two districts in Ghana. *Social Science Medicine*. 1997; 45:659-667.
 73. Becker MH, Haefner DP, Kasi SV. Selected psychosocial models and correlates of individual health related behaviour. *Medicine*. 1977; 15:27-46.
 74. Berman PC, Kendal T, Bhattacharyya K. The household production of health: Integrating social science perspectives on micro-level health determinants social science and medicine. 1994; 38(2):205-215.
 75. Bruce-Chwatt LJ. History of malaria from prehistoric to eradication, 1-59. In W.H. Wernsdorfer and I. McGregor (ed), *Malaria: Principles and practice of malariology*, 1.

- Churchill Livingstone, Edinburgh, United Kingdom, 1988.
76. Chijioke-Nwauche I, Maduka O, Anopeju A, Oboro I, Paul N, Ogoro M, Otto G, *et al.* Malaria and its economic burden among pregnant women in Rivers State, Nigeria. *Open Journal of Obstetrics and gynaecology.* 2020; 10:571-582.
 77. Chima RI, Goodman CA, Mills A. The economic impact of malaria in Africa: A critical review of the evidence. *Health Policy.* 2003; 63:17-36.
 78. Chukwuocha UM, Ukaga CN, Dozie INS, Nwoke BEB, Breiger WR, Nwankwo E, *et al.* Social and behavioural baseline for guiding implementation of an efficient trial of insecticide treated bed net for malaria control in Nsukka, Nigeria. *International Quarterly Journal of Community Health.* 1997; 16:47-61.
 79. Drummond M. Cost of illness. A major headache? *Pharmaco-economics.* 1992; 2:1-4.
 80. Ebong OO, Nwauche CA, Ogbuehi IH, Chijioke-Nwauche IN, Ezirim CT, Umoh RE, *et al.* Is this evidence of success in malaria prevention and control measures? *Greener Journal of Medical Sciences.* 2015; 5:1-10. <https://doi.org/10.15580/GJMS 2015/051114379>.
 81. Eleanya EU. Anaerobic digestion of wastes by microorganisms and its health effect on wastes disposal workers. PhD thesis submitted to the Postgraduate School Rivers State University Medical Microbiology department of Medical Laboratory Science of the University, 2015.
 82. Ezeanya CI. Season variation in malaria episodes among residence in Udi, a semi-urban community in South east Nigeria. *The Journal of parasitology.* 1998; 19:39-43.
 83. FMOH. National Malaria control programme/Federal Ministry of Health Annual Report, 2005.
 84. Ghebreyesus TA, Alemayehu T, Bosman A, Witten KH, Teklehaimanot A. Community participation in malaria control in Tigray region Ethiopia, *Acta Tropica.* 1996; 61:145-156.
 85. Glanz K, Rimer BK, Viswanath K. (Eds.). *Health and behaviour and health education; theory research, and practice.* 4th edition, Jossey – Bass, San Francisco, 2008.
 86. Jimoh A, Sofola O, Petu A, Okorosobo T. Quantifying the economic burden of malaria in Nigeria using the Willingness to pay approach. *Cost effectiveness and resource allocation.* 2007; 5:1428-1754.
 87. Kirigia JM, Snow RW, Fox-Rushby J, Mills A. The cost of treating paediatric admissions and the potential impact of insecticide-treated mosquito. Nets on hospital expenditure. *Tropical Medicine and International Health.* 1998; 3(2):145-150.
 88. Kioko UM. The economic burden of malaria in Kenya: A household level investigation. Doctor of Philosophy in Economic of University of Kenya Thesis, 2007.
 89. Laxminarayan R. Does reducing malaria improve household living standard? *Tropical medicine and international health.* 2004; 9(2):267-271.
 90. Leighton C, Foster R. *Economic impacts of malaria in Kenya and Nigeria* Bethesda, MD; Abt Associates, 1993.
 91. Lindsay SW, Martens WJ. Malaria in the African Highlands; Past, present and future. *Bulletin of World Health Organization.* 2001; 76:33-45.
 92. Lucas AM. Economic effects of malaria eradication: Evidence from the malaria periphery; Brown University, 2005.
 93. Matur DM, Azare BA, Ugbong L. The prevalence of Asyriptomalic malaria parasitania amongst undergraduate students of university of Abuja. *The Nigeria Journal of parasitology.* 2001; 22:44-62.
 94. Mbanugo JI, Ejims DO. Plasmodium infections in children aged 0-5 years in Awka metropolis, Anambra State, Nigeria. *Nigerian Journal of Parasitology.* 2000; 21:55-59.
 95. Mitra BS, Tren R. The burden of malaria. Liberty institute, occasional paper No. 12 New Delhi, India, 2002.
 96. National Bureau of Statistics. Labour force statistics – 1: unemployment and underemployment report, 2018.
 97. Onwujekwe OE, Chima R, Okono PO. Economic burden of malaria illness versus that of a combination of all other illnesses. A study in five malaria holo-endemic communities. *Health Policy.* 2000; 54:143-159
 98. Packard RM. The political economy of malaria epidemic in colonial Swaziland. 1984; 25(2):189-212. University Cambridge press.
 99. Pehrson PO, Bjorkman A, Brohult J. Is the working capacity of Liberia Industrial workers increased by regular populaxis? *Annual of Tropical Medicine and Parasitology.* 1984; 75(5):487-94.
 100. Pondei KE, Lawani I, Ndiok E. Prevalence of the malaria parasite in screened blood in a tertiary health centre in the malaria – endemic Niger Delta region of Nigeria. *Global Advanced Research Journal of Microbiology.* 2012; 1:188 193.
 101. Prescott N. Coping with catastrophic health shocks. Paper presented at a conference on social protection and poverty, Inter American Development Bank, Washington, DC., 1999.
 102. Pryer J. When bread winners fall ill. Preliminary finding from a case study in Bangladesh. *105 Bulletin.* 1989; 20:49-57.
 103. Ranson K. Reduction of catastrophic healthcare expenditures by a community based health insurance scheme in Gujrat, India: Current experiences and challenge. *Bullentin of World Health Organisation.* 2002; 80:613-21.
 104. Republic of Kenya. Kenya welfare monitoring survey, 2003, Central Bureau of Statistics: Ministry of Finance and Planning, Nairobi, 2006.
 105. Rice DP. Cost of illness studies: Factor fiction? *Lancet.* 1994; 341:1519-1520.
 106. Rolle AR, Omon IJ. Economic burden of malaria: Evidence from Nigeria's data *Amity Journal of Healthcare Management.* 2018; 3:28-39.
 107. Russell S. Can households afford to be ill? the role of the healthcare system, material resources and social networks in Sri Lanka. PhD thesis. London School of Hygiene and Tropical medicine. University of London, 2001.
 108. Russell S. Ability to pay for healthcare concepts and evidence. *Health policy and planning.* 1996; 11:219-37.
 109. Russell S. The economic burdens of illness for households in developing countries. A review of studies focusing on malaria, tuberculosis and human immune deficiency. *Virus/acquired immune deficiency syndrome. American Journal of Tropical Medicine and Hygiene.* 2004; 71(2):147-155.

110. Russell S. *Illuminating cases: Understanding the economic burden of illness through case study household research: The London School of Hygiene Tropical Medicine*. Published by Oxford University press, 2005. doi:1093/heapolPczi035.
111. Malaney P, Sachs J. The economic and social burden of malaria. *Nature*. 2002; 415(6872):680-685.
112. Sauerborn R, Nougara A, Hien M, Diesfield HJ. Seasonal variations of household costs of illness in Burkina Faso. *Social Science Medicine*. 1996; 43:281-290.
113. Sauerborn R, Adams A, Hien M. Household strategies to cope with the economic cost of illness; *Social Science Medicine*. 1999; 43:291-301.
114. Scoones I. *Sustainable rural livelihoods; a framework for analysis*. IDS working paper 72. Brighton: institute of development studies, 1998.
115. Wu Y, Fan H, Wang X, Zou G. A regulated digital currency. *Science China Information Sciences*. 2019; 62:1-12.
116. Xue G, Xu J, Wu H, Lu W, Xu L. Incentive mechanism for rational miners in bitcoin mining pool. *Information Systems Frontiers*. 2021; 23:317-327.
117. Yadav SR. *Cryptocurrency: The Future Of Money And Its Journey So Far In India*. Multi-Disciplinary Research For Saving, 2022, P.187.
118. Zhong L, Wu Q, Xie J, Li J, Qin B. A secure versatile light payment system based on blockchain. *Future Generation Computer Systems*. 2019; 93:327-337.
119. Zubir DASBHM, Aishah DN, Ali DA, Mokhlis DS, Sulong DF. Doing business using cryptocurrency in Malaysia. *International Journal of Management and Humanities*. 2020; 4(9):48-157.
120. Zulhuda S. Whither policing cryptocurrency in Malaysia?. *IJUMJ*. 2017; 25:179.