



ADDIS ABABA UNIVERSITY

SCHOOL OF COMMERCE

DEPARTMENT OF BUSINESS ADMINISTRATION

AND INFORMATION SYSTEM

**INVESTIGATION OF KNOWLEDGE, ATTITUDE AND PRACTICES TOWARDS
CRYPTO CURRENCIES AMONG PRIVATE BANK LEADERS**

**A RESEARCH THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS OF
THE MASTER OF ARTS DEGREE IN BUSINESS LEADERSHIP**

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DECLARATION

I, Tilahun Desalegn, hereby declare that the research project entitled “Investigation of knowledge, attitude and practices towards cryptocurrency in private bank leaders” in Addis Ababa submitted for the award of Master of Art degree in Business Leadership is my original work has not been submitted for any degree at Addis Ababa University or any other University. I have carried out the study independently with the guidance and support of my research advisor Wasihun Mohammed(PhD). All other contributors involved in supporting this project have been heartily acknowledged.

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Signature

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APPROVAL

This is to certify that Tilahun Desalegn has carried out this research project entitled “Investigation of knowledge, attitude and practices towards cryptocurrency among private bank leaders”. This work submitted in partial fulfillment of the requirement for a Master of Art in Business Leadership, complies with University regulations and meets accepted standards for originality and quality.

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LIST OF ACRONYMS/ABBREVIATIONS

BTC.....	Bitcoin
DLT.....	Distributed Ledger Technology
ETH.....	Ethereum
EU.....	European Union
ID.....	Identification
IRS.....	Internal Revenue Service
KAP.....	Knowledge, Attitude and Practice
MIT.....	Massachusetts Institute of Technology
MOU.....	Memorandum of Understanding
NBE.....	National Bank Of Ethiopia
UNECA.....	United Nations Economic Commission for Africa
USD.....	United State Dollar

ABSTRACT

The study was conducted to investigate the knowledge, attitude and practices of private bank leaders towards cryptocurrencies. To meet this purpose, a descriptive quantitative research design was applied. Three hundred forty four private bank leaders were selected using simple random sampling. The questionnaire data from the sample private bank leaders were entered and analyzed by SPSS for windows version 20. Descriptive statics analysis; frequency and percentage were used to describe the data. The findings revealed that many of the bank leaders were not familiar with cryptocurrency, latest technologies related to cryptocurrency and how it works. Majority of the bank leaders have negative attitudes about cryptocurrency which might be due to lack of awareness about it and how it works. Additionally, more than 80% of the respondent have never involved in cryptocurrency practically which will hinder the adoption of cryptocurrency in the banking industry. Another essential point the researcher deduced from the results of the study was that the major hindrance to adoption of cryptocurrency were found to be fear of losing money, lack of awareness, lack of access and negligence. Consequently, it is recommended that the private bank leaders should increase their and their staffs awareness about cryptocurrency and how it works through training because bank leaders are key players in financial sector and their awareness about cryptocurrency affects the decision and implementation of cryptocurrency related programs.

Key words: Cryptocurrency; Blockchain; Bitcoin

CHAPTER ONE

1 INTRODUCTION

A virtual currency intended to act as a medium of exchange is called a cryptocurrency. It took centuries to move from a barter system to fiat currency, but only a few years to move from fiat to cryptocurrency. The regulation of cryptocurrencies and their use as a medium of exchange has recently received more attention and is currently the subject of most global debate. Cryptography and blockchain technology used to maintain transactions secure cryptocurrencies. In 2009, the general public became accessible to the cryptocurrency Bitcoin for the first time. Bitcoin and other cryptocurrencies took years to become popular, but they have expanded rapidly since then, and cryptocurrencies like Bitcoin will continue to be widely used online(Árnason, 2015). As Bitcoin and other cryptocurrencies grow, so do their potential threats and concerns, as well as their benefits to law enforcement, the financial system, and the general public. The way money works has changed the paradigm of human existence. Human beings originally exchanged things for salt, stone tools, etc., and then exchanged for gold, and now the system of currency exchange is functioning. Blockchain technology is believed to fundamentally change the current financial system. Blockchain technology is expected to completely transform the current financial system and implement international business models(Kar, 2022).

Cryptocurrency was introduced in 2009 under the name of Sasoshi Nakamoto. After that, many virtual currencies were born. The cryptocurrency market has earned the trust of many due to its tremendous growth in value, but has not yet been created or regulated by any central authority. Few countries have accepted or allowed virtual currencies of exchange, but many are undecided. Few countries have actively recognized the risks involved in accepting cryptocurrencies as their currency and issued their own digital currencies to stabilize their economies(Holtmeier and Sandner, 2019). In cryptocurrency trading, intermediaries such as banks and financial institutions are left out of the spiral. Cryptocurrency trading does not require the role of financial intermediaries such as banks to guarantee the value of the currency.

1.1 BACKGROUND OF THE STUDY

In Africa, interest in cryptocurrencies, a form of digital currency, is steadily growing. Some economists say this is disruptive innovation thriving on the continent (Agu and Kindgom, 2020). Because cryptocurrencies are internet-based, they are not tied to your geographic location. That transaction is stored in a database called the blockchain. A blockchain is a group of connected computers that record real-time transactions on a ledger. The difference between cryptocurrencies and fiat currencies is that cryptocurrencies are not regulated by governments, do not require intermediaries, and transactions are based on the internet, so they can be done anywhere in the world. Major global cryptocurrency brands include Bitcoin, Ethereum, Litecoin, Ripple, Dash, Risk and Monero, but Bitcoin leads in Africa. Founded in 2009 by one or more people under the pseudonym Satoshi Nakamoto, many people hopes Bitcoin will become the new mode of financial transactions in the digital age (Ayeswarya and Varghese, 2021).

The emergence of cryptocurrencies has posed challenges to government leaders in managing the money supply. For years, governments have exercised monetary policy by controlling the supply of national currencies. However, cryptocurrencies are decentralized, meaning governments have little or no power to control them. Research reveals that governments could consider developing their own cryptocurrency to maintain power and influence the money supply. Alternatively, they can use the legal framework to enable or disable cryptocurrency as legal tender within their jurisdictions. Due to its global nature, cryptocurrency can be used as an international payment method and become an integrated part of the FOREX market. Lastly, as cryptocurrency continues to gain popularity worldwide, regulations on crypto exchanges and issuers will be needed to avoid price bubbles (Le, 2023).

There are currently over 20,000 cryptocurrencies in the world. Due to the current era of technological connectivity in the world, Ethiopia currently welcoming blockchain technology, the technology underlying cryptocurrencies (ASFAP, 2021). Blockchain can be used for many purposes, but a notable feature of blockchain is related to cryptocurrencies. However, cryptocurrencies generally have various drawbacks. This includes that the use of cryptocurrencies is inherently unregulated and poses risks to consumers. In most cases, consumers have no remedy for disputed transactions. This is because user anonymity is the very nature of cryptocurrency, making it difficult, if not impossible, to track down and

identify perpetrators of cryptocurrency transactions. Also, since the price of virtual currency fluctuates greatly, its value is not constant. Therefore, unlike fiat currency values, cryptocurrencies do not have a coordinated currency value assigned as a payment system. This shows that cryptocurrency exchange rates are subject to high volatility(Bholane, 2021). Additionally, cryptocurrencies get a bad reputation due to real -life cases where cryptocurrency payments are linked to criminal activity. Cryptocurrency payments are associated with crimes such as money laundering, tax evasion, fraud, and funding terrorist groups.

The fact that African governments currently do not regulate cryptocurrencies may be a factor driving the growth of cryptocurrencies on the African continent. But there is no guarantee that the government will not change its current thinking. The Central Bank of Nigeria recently pointed out that it is not that the government does not want to regulate cryptocurrencies, but that it may not have the power to regulate them. Nigeria's top bank, which is currently suffering from a 12% inflation rate, said that just like no one controls or regulates the internet, Bitcoin cannot be controlled or regulated. Announced.;we don't own it. Africans who are unbanked and live in politically unstable countries, fearing the collapse of the banking sector or arbitrary government extortion, may be attracted to cryptocurrencies(Agu and Kindgom, 2020). Bitcoin transactions help remove the procedural bottlenecks found in traditional banking and financial services.

Cryptocurrency trading is now a fulltime job for various cryptocurrency holders in Africa. This is made possible by the compatibility of the African ecosystem and blockchain technology. Cryptocurrency adoption in Africa increased by 1200% between 2010 and 2021. This has led to the rise of several cryptocurrency projects such as Mauritius' "Ethereum Island" and ETHSafari. African ecosystems can use blockchain technology for: B. Smart Contracts, Rapid Integration(Ozili, 2022).

The issue of recognizing cryptocurrencies has become an important topic of discussion among experts in many disciplines with the development of emerging blockchain technology and the growing demand for digital currencies. This new type of money, which is expected to become the common currency of the 21st century, moves in the form of encrypted codes between individuals or entities connected to peer-to-peer networks. Cryptocurrencies are at the forefront of world economic and financial development today. This has created numerous opportunities and threats in financial markets around the world and has attracted the attention of a significant number of governments, economic actors, and citizens. Accordingly, the number of actors involved in the cryptocurrency trade has increased dramatically in recent years. The questions

the leaders in financial sector expected to answer are first how to minimize the negative impact of cryptocurrencies and how to use the opportunities(Ghasemi, 2021).

The existing researches did not articulate whether cryptocurrency adoption is beneficial or not and the level of awareness in financial and governmental leaders are not clearly explained. The attitude leaders have about cryptocurrency is not researched well. The aim of this study was to investigate the knowledge, attitude and practices towards cryptocurrencies among private bank leaders; which will contribute to the existing body of knowledge for interested bodies in the leadership and cryptocurrency related issues.

1.2 STATEMENT OF THE PROBLEM

As pointed out in the 1995 Cambridge Dictionary; cryptocurrency is a digital currency that uses cryptographic technology to regulate the creation of monetary units and to verify fund transfers, independent of central banks. Cryptocurrencies use blockchain technology, shared ledgers, or continuously updated records of transactions. All transactions ever made are stored in this ledger and distributed among users, completely decentralized. As a result, third parties who previously managed the ledger, such as central banks, are no longer in this position.

According to the cryptocurrency exchange COINGECKO; the global cryptocurrency market cap now is \$1.21 Trillion and -38.21% change one year ago. As of today, the market cap of Bitcoin (BTC) is at \$532 Billion, representing a Bitcoin dominance of 44.03%. By offering people faster, less expensive, and more secure payment options, Bitcoin and other blockchain-based cryptocurrencies aim to upend the current financial system. The developing world, where residents frequently suffer due to subpar monetary institutions and unreliable and frequently unavailable financial services, is where the potential benefits of offering superior private money as an alternative to state currency monopolies are most obvious. No area has been more adversely affected by subpar financial institutions than Africa(Burns, 2022).

Cryptocurrencies and blockchain technology are a relatively new concept only about a decade back. Developed countries have the right to use and early adopt this technology. When we go to developing countries, especially in sub-Saharan Africa, the majority of the population does not have access or opportunity to know about technology and apply it. Lack of political and economic stability, famine and war are the main problems in developing countries. Due to the impact of globalization, whether we are prepared or not, the impact of change is imminent. Cryptocurrency is becoming the future of finance and it has no central authority or issuer, but instead uses a decentralized system to record transactions and issue new units. Existing centralized financial institutions must have the awareness and will to quickly adopt and adopt the technology before it is too late and minimize its negative impact on the industry.

According to the report generated by Further Africa; Nigeria, Kenya, South Africa, Egypt, and Ethiopia are the top 5 countries in Africa's ecosystem leading in cryptocurrency trading as well as the types of coins and cryptocurrency projects that are causing such great heights, from highest to lowest. With more than 1.1 million cryptocurrency owners(crypocurrency owners

means number of crypto wallets not number of people that means a person can have five, ten twenty or any number of wallets depends on the person interest), Ethiopia comes in last on the top five list. Despite its stance, Ethiopia continues to work to advance blockchain technology, boost the number of cryptocurrency projects, and enhance cryptocurrency trading. A group of specialists met in Addis Abeba in 2017 to go through and debate a UNECA paper on the potential of blockchain technology in Africa. Nevertheless, Ethiopia already welcomed Blockchain, the technology behind cryptocurrency. Recently a cryptocurrency developer named Cardano in partnership with Ethiopia's ministry of education is underway to develop the world's biggest blockchain project in Ethiopia to create a digital identity for Ethiopian teachers and students. Once the structure of blockchain technology is installed in Ethiopia it is easy to introduce a cryptocurrency to many Ethiopian users. Additionally, Ethiopian government signed a memorandum of understanding with the same cryptocurrency developer to launch a new payment modality which will enable Ethiopians to pay their utility bill in cryptocurrency

Although a study is conducted which assess to what extent cryptocurrency is considered money and legal tender under Ethiopian legislations(Asgedom, 2021) and another study which assesses the challenges and prospects of adopting cryptocurrencies in Ethiopia(ASFAW, 2021). As far as the researchers reading was concerned there were no studies regarding cryptocurrency knowledge, attitude and practices in Ethiopia. Under this research investigation of the Knowledge, Attitude and Practices towards cryptocurrencies among private bank leaders will provide the inputs needed for the design of an effective adoption program, as well as the baseline data for the future evaluation of the benefits and challenges of cryptocurrencies in Ethiopia. Consequently, this research has examined the knowledge, attitude and practice of private bank leaders as they are among the most influential players in the financial sector and expected to know about the opportunities and challenges of cryptocureencies in the financial sector of Ethiopia economy. The bank leaders awareness about the cryptocurrencies will affect their decision regarding the adoption and regulation of the cryptocurrencies in the banking industry and will minimize the negative impact if they get prepared in advance to handle the issues.

1.3 RESEARCH QUESTIONS

- What is the level of private bank leaders knowledge about cryptocurrencies?
- What is the attitude of private bank leaders towards cryptocurrencies?
- What do the private bank leaders practice of cryptocurrencies look like?

1.4 OBJECTIVES OF THE STUDY

1.4.1 GENERAL OBJECTIVE;

- The major purpose of this study was to investigate the Knowledge, Attitude and Practices of private bank leaders in Addis Ababa towards cryptocurrencies

1.4.2 SPECIFIC OBJECTIVES;

This study was specifically conducted to:

- Explore knowledge of cryptocurrencies among private bank leaders
- Examine the attitude of private bank leaders towards cryptocurrencies
- Study the practice towards cryptocurrencies among private bank leaders

1.5 SIGNIFICANCE OF THE STUDY

Both the government policy maker and the private investor will benefit from this research; because it allows individuals, bank leaders and government bodies to make informed decisions, understand complex concepts, and solve problems related to cryptocurrencies in the banking industry or at country level. The following topics were the subject of research: first, awareness or knowledge of cryptocurrencies; second, the believe or attitude towards cryptocurrencies; and third, the use or practices of cryptocurrencies among private bank leaders. The communities will benefited from proper implementation of recommendations from this study. Furthermore, upcoming researchers will use the results of the current study as a reference while doing a research on the topic. The results will also be used by program planners as an input in their planning.

1.6 SCOPE OF THE STUDY

The scope of this research was essentially about investigation of the knowledge, attitude and practices towards cryptocurrencies among private bank leaders in Addis Ababa. So state owned bank leaders and private bank leaders outside of Addis Ababa were not included in this study. The reasons state owned banks excluded were first their organizational structure is branch A, B & C levels which is not clear to proportionally allocate the samples and difficult to match with the branching styles in private sector banks. The other reasons were the researcher have had time shortage and limited budget for the study which is not enough to include the leaders in government owned banks and those who were out of Addis Ababa. Finally the researcher want to contribute his share by assessing the knowledge, attitude and practices of leaders in private sector banks so that the upcoming researchers will explore the government owned banks and at the national level at large. The research design was descriptive study which assesses the what and it did not explore the why behind the findings.

1.7 LIMITATION OF THE STUDY

The limitations of this study were the exclusion of state owned bank leaders and exclusion of private bank leaders outside of Addis Ababa. The reasons includes organizational structure difference, time constaints and budget shortage as explained in the scope above. The absence of similar work about cryptocurrency, related documents and legal ground in Ethiopia limited availability of comprehensive information. Some of the bank leaders were not willing to get interviewed. Methodologically this descriptive research described the phenomenon and its characteristics. This type of research design is more concerned with what rather than why something has happened. So it will be better if it was mixed method to explore the reasons behind the findings of this study. The absence of related work in similar topics has made discussion part a bit difficult.

1.8 OPERATIONAL DEFINITION

For this specific study, the following concepts are defined operationally as presented below:

- **Bank Leader** is any person who assumes responsibility in the private bank as manager or department head
- **Attitude:** The way bank leaders think and behave towards cryptocurrency. It is measured by 8 questions with five point Likert's scale. All individual answers to attitudinal questions were computed to obtain total scores; then, mean score was calculated to categorize as having good attitude (if participants scored $>$ or $=$ mean score) or poor attitude (if Participants scored $<$ mean score).
- **Knowledge:** It is the awareness of bank leaders about cryptocurrency. It is measured by calculating the mean score of the 12 items and categorized as knowledgeable (if participants scored $>$ or $=$ mean score of the correctly answered questions) or not knowledgeable (if participants scored $<$ mean score).
- **Practice:** The bank leaders involvement in cryptocurrency. It is defined as investing or trading any of major cryptocurrency like Bitcoin, Ethereum, Dogecoin or Lite coin. All individual answers to practice questions were computed to obtain total mean scores and categorized as good practice (if participants scored $>$ or $=$ mean score) or poor practice (if participants scored $<$ mean score) (Kassahun and Mekonen, 2017).

CHAPTER TWO

2 LITERATURE REVIEWS

2.1 UNDERSTANDING CRYPTOCURRENCIES AND HISTORY OF BITCOIN

As Harwick points out, cryptocurrencies are digital assets used as a type of convertible currency for transferring assets and other types of financial instruments(Harwick, 2016). Significant government agencies such as the banking system and other financial institutions do not have jurisdiction over cryptocurrencies. Instead, a public ledger is used. This ledger records all sales, transactions, etc., and is not managed by any particular organization or entity. This ledger uses blockchain technology as a public transactional database for transferring currencies. This ledger records data transfers and information related to cryptocurrencies using simple accounting methods. The ledger's single transaction mode and single endorsement of transactions provide a higher level of privacy. The foundation of Bitcoin was built on this strange historical process(Chohan, 2017). There was talk that American cryptographer David Chaum said he is believed to have developed the first cryptocurrency called ECash in the early 1980s. ECash is considered the origin of electronic ledger trading, even though many trades have never been made. After developing his ECash in 1984, Chaum also developed an electronic payment system that is largely invisible to governments and financial systems. Over the next five years, several different and improved forms of finance emerged in the industry. Years later, cryptocurrency details were made public through his MIT email group. Many teachers and students at the university expressed interest in this list. Many MIT faculty and students are believed to have created a novel and distinctive miniature cryptocurrency. The extent of MIT's influence is unknown, but it is believed to have contributed to many of the major cryptocurrencies still in use today. The most important aspect of cryptocurrencies, especially Bitcoin, according to Milutinovic(Milutinović, 2018), is that they cannot be controlled by any server or authority, they are completely secure and have many possibilities. humanity will be wiped off the face of the earth than one transaction or user on this platform will be revealed. As Milutinovic noted in 2018, there is no watchdog or regulator for cryptocurrencies, and transactions recorded in the log are completely private. This confidentiality is possible because no personal information is required during the registration process. Furthermore, cryptocurrencies maintain privacy. Setting up a virtual wallet requires only a few basic steps. One needs to enter the required email and password once the blockchain

wallet is found.

There is a few additional information that needs to be provided, but all of them should be basic and anonymous. To start buying cryptocurrency with a virtual wallet, start routing the money transfer from a bank account. Add multiple codes and passwords to virtual wallet used for exchange security. By sharing the code with other users, it is possible to request or send cryptocurrency and then the transaction can begin. Bitcoin was the first cryptocurrency to gain public attention. As madey mentioned, Satoshi Nakamoto is the one who invented Bitcoin(Madey, 2017). An unnamed designer believed to be from Japan goes by the pseudonym Satoshi Nakamoto. According to Madey, the codebase was still being worked on by Nakamoto and other developers using the site until about mid -2010. So far, Nakamoto has been able to use his platform to exert considerable influence to the cryptocurrency market. Since then, Gavin Anderson has served as the company's spokesperson and celebrity. Since then, a wide range of cryptocurrencies including Litecoin, Ethereum, Ripple and countless others have been developed. Most of them are listed on Coinbase, which acts as a cryptocurrency exchange. More recently, some have even existed backed by other commodities, including gold, and other precious metals. Despite the fact that cryptocurrencies have been around for quite some time, it is only now that many media are paying attention to them. As Chohan claims(Chohan, 2017), typical of the academic community's slow response to the student phenomenon, the first cryptorelated journal, Ledger, was not launched until 2015/ 2016. People are now starting to realize the importance of cryptocurrency as many mainstream media such as newspapers and news networks are gradually starting to emphasize it more. Despite its long history of speculation and constant changes, Bitcoin is now frequently discussed in the financial landscape.

2.2 BLOCKCHAIN TECHNOLOGY

Understanding Blockchain, the technology that powers cryptocurrencies, is essential before moving on to the topic of what they are. A peer -to -peer ("P2P") network of two parties connected by a blockchain technology records transactions between them. Since consensus is obtained within the network, intermediaries are not required to validate these transactions. The ledger is therefore decentralized, distributed, and based on distributed ledger technology (DLT). Because every piece of data must first be confirmed by all of the Blockchain's participating devices, it protects the general ledger from data manipulation. Data cannot be changed once it has been registered in the decentralized ledger. A blockchain could be used to store several types of data(Okeke et al., 2021).

The definition of cryptocurrency states that it is a digital currency designed to serve as a medium of exchange. Cryptocurrencies have evolved on a peer-to-peer blockchain altar that allows recipients to receive encrypted payments directly from the sender. Cryptocurrency transactions do not consider intermediaries like banks and other financial institutions when calculating the value. In bitcoin transactions, the value of the coin is not guaranteed by financial intermediaries such as banks. So banks are not involved in these transactions. How were cryptocurrencies originally purchased or received? As for fiat money, it is issued by the central bank, while cryptocurrency is created by mining through the blockchain using cryptocurrency technology. It is a method of issuing a new cryptocurrency. The blockchain system consists of users, developers, miners, node maintainers, and the interactions that provide the functionality of the distributed ledger (Dos Santos, 2017). Such mining process requires miners to have capital expenditure to purchase software and hardware. Software including GUIMiner, BFGminer and CGminer are examples used in Bitcoin mining (Fauzi et al., 2020). While the hardware is AntMiner, Avalon and ASICMiner. Mining other currencies using various algorithms requires the use of high-speed, high-end graphics cards. For a new miner, one needs to register for an online crypto wallet that can store and accept cryptocurrencies (Fauzi et al., 2020). When a miner is able to solve the puzzle in the blockchain system, the digital coins are rewarded and transferred to the predefined wallet.

According to many cryptocurrency protocols, mining works by validating transactions by linking to a previously accepted block (O'Dwyer and Malone, 2014). Blockchain technology records each transaction in its unit (Nofer et al., 2017). A unique identifier is assigned to each block and the block before it. This is called a proof-of-public protocol. Proof of work is a protocol for verifying a transaction and notifying others. Users or miners must work to authenticate or prove that they are real identities. This work revolves around algorithms and puzzles that can be solved by computational mathematical processes (Tschorsch and Scheuermann, 2016). Proof of work is in line with the working principle of cryptocurrencies to replace the centralized payment system imposed by the banking system. The main basis of this system is to charge users, i.e. service requesters, to solve a problem that is considered difficult to solve related to its verification (Kroll et al., 2013). In this way, the proof-of-work principle will be able to restrict access to a certain service in cryptocurrency mining and trading. Miners will have to solve the puzzle embedded in the block, containing the hash of the previous block, the transaction hash of the current block, and the address that will be rewarded once the puzzle is solved. This is the basis of the mining process. This created a blockchain, a record of the transaction that occurred. This blockchain technology will prevent any scammer from doubling their cryptocurrency spending by falsifying ledger transactions (Vranken, 2017).

2.3 ADVANTAGES OF CRYPTOCURRENCY

No Inflation

Twenty -one million Bitcoins serve as a hard upper limit on the amount of coins. There is no chance for inflation to arise in the system because neither political forces nor corporations are able to modify this arrangement

Peer -to -peer cryptocurrency networks

Information (or money, in this scenario) is exchanged between two to three software clients. A bitcoin network includes all program -wallets that users have installed. Each client keeps track of all committed transactions as well as the quantity of bitcoins stored in each wallet. Numerous dispersed servers handling hundreds of transactions. The transfer of money between countries is uncontrollable by banks, taxes, or governments(Rice, 2019).

Unlimited Transaction

Each wallet holder has limitless transaction options and can send money to anyone, anywhere, for any amount. You can send money to anyone, anywhere in the globe where the wallet located

No Restrictions

Payments made via this method cannot be reversed.The coins cannot be reproduced, countered it, or used more than once. The integrity of the entire system is ensured by these skills. Every month, there are more and more online stores, resources, and businesses that accept Bitcoin as the transaction cannot be regulated or stopped.

Low operating costs for BTC

The BTC, cryptocurrency combines the features of e -commerce with the functionality of actual money. No need to pay banks and other companies commissions and fees. The main component of such a procedure is mathematics, which is free. In comparison to other systems, this one has a reduced commission price. It represents 0.1 percent of the transaction value. Operation interest fees are transferred to Bitcoin miners' wallets(Bholane, 2021).

Decentralization

Each computer mining bitcoins is a member of this system, and the network is spread among all users so that there is no single point of control. This indicates that the central authority lacks the jurisdiction to impose regulations on bitcoin owners. Even if a portion of the network goes down, the payment system will still function normally.

Simple to use; using BTC is practical for businesses. A BTC wallet can be created by the business in about 5 minutes, and it can then be used right away without any delays or fees

Anonymous; It is completely transparent while remaining completely anonymous. Any company can generate an unlimited number of bitcoin addresses without using a customer's name, address or other personal data.

Transparency; History of all previous transactions is kept in BTC. A consecutive sequence of blocks is called a blockchain. Blockchain stores all information. So if a company has revealed its bitcoin address, anyone can know how many bitcoins that company has. If the address of the company is not disclosed publicly, no one will know that it belongs to this company. Companies often use a different BTC address for each transaction to ensure complete anonymity.

Transaction speed; the ability to send money anywhere and to anyone within minutes of the BTC network having processed the payment. Only the owner of the wallet has permission. There is a special form of electronic payment in which the account belongs only to the owner. For example, in PayPal, the system reserves the right to freeze all funds in an account without notifying the owner if for some reason the company determines that the owner is using the account improperly. The owner is solely responsible for confirming the correct use of the account. Bitcoin owners have their respective private and public keys, which together form a wallet address.

Inability to use personal information for fraudulent purposes

This is an important idea. Credit cards are now used for the majority of purchases. They are not reliable. Customers must enter the following information when filling out a form on the website: card number, expiration date and code. It's hard to think of a less secure payment method. As a result, credit cards are frequently stolen. BTC transactions do not require the disclosure of personal information. Instead, two keys, public and private, are used. The private key is known only by the owner, but the public key is available to everyone.

2.4 DISADVANTAGES OF CRYPTOCURRENCIES

Anonymizing user

Using a pseudonym, cryptocurrency transactions are mostly done in secret. As a result, users maintain their anonymity as only their private keys are exposed when engaging in crypto related transactions. Therefore, bitcoin transactions are considered anonymous because the user's name cannot be connected to the account associated with the cryptocurrency transaction.

Loss

Cryptocurrencies can be easily lost; for example, although it is still present in the blockchain, if a user loses the private key of a particular cryptocurrency wallet, the cryptocurrency will no longer be usable. As a result, the user cannot retrieve the bitcoin, which means he is prevented from taking the cryptocurrency. In addition, computer efforts facilitate cryptocurrency theft. \$1.9 billion worth of Bitcoin was stolen in 2020. All of this shows how quickly cryptocurrencies can be lost or stolen, wasting users' money.

Consumer protection

The main problem with the use of cryptocurrencies is that they are not regulated, which puts consumers at risk. Since user anonymity is an essential feature of cryptocurrencies, consumers rarely have recourse when crypto transactions are disputed. As a result, it is almost impossible to track down and identify those responsible for cryptocurrency transactions.

Changes in Exchange Rates

The erratic nature of cryptocurrency values is a cause for constant concern. This causes constant difficulty for Bitcoin. For example, the value of Bitcoin ranged from \$0.50 to \$1,130 over a two -year period from 2011 to 2013. Additionally, in 2017, Bitcoin lost a quarter of its value in just one trading day. For this reason, cryptocurrencies, unlike the value of fiat currencies, do not have a modified monetary value assigned to them as a method of payment. This implies that there is a large fluctuation in the exchange rate of cryptocurrencies.

Offense

Individuals can use cryptocurrency payments for illegal transactions thanks to its decentralized and anonymous nature. Accordingly, the use of cryptocurrencies for payments has been linked to crimes such as money laundering, tax evasion, fraud, and financing of terrorist organizations. In addition, due to the decentralized nature of cryptocurrencies, it is difficult for law enforcement to detect illegal activities funded by their use. The Silk Road case is a famous illustration of how cryptocurrency payments can be used for illegal activities, where users can use Bitcoin to buy drugs and illegal goods.

2.5 FUTURE AND POTENTIAL OF CRYPTOCURRENCIES

Cryptocurrencies seem to have an endless and unpredictable future. Predictions about the future of cryptocurrencies and what lies ahead can be made in different ways. According to some economists and financial experts, cryptocurrency will not only be regulated by the government but within fifteen to twenty years it will almost certainly become the standard currency. With official support, this currency will be accepted almost everywhere and may eventually become a form of universal currency. Government involvement creates a range of responses and consequences. The outcome of government involvement is inherently uncertain and subject to a range of different situations in the future. This can be compared to the impact of the euro on the EU, making trade and other types of business acquisition a more transparent process, making everyday shopping easier and standardized economy. The expansion due to the use of similar currencies can make transactions much easier and simpler for the average person. Tax returns are another area that can be simplified through the use of cryptocurrencies. The electronic nature of cryptocurrencies makes tax returns easier; this can streamline the tax process and greatly help the IRS on how to file a tax return. The government can see what every bitcoin transaction is for if they can figure out how to monitor and interfere with the transactions. All this crypto data is then easily incorporated into an online tax return. An interesting government action can also be used to collect census data that can be more easily tracked through purchase history.

The possibility of cryptocurrencies becoming another financial bubble also exists. In the summer of 2018, here are the predictions for the two most popular cryptocurrencies, Ripple and Bitcoin. The idea is that the crypto market can only grow enough before it bursts like a bubble. A market shock or interdependence of currencies in the market can be the cause of the boom. Businesses that accept crypto will benefit from lower transaction costs and an increased customer base. Some conversion costs were omitted during the conversion process. This can be a problem for some older people who like to hold the actual hardware device in their hands. The problem of the dead is also noted. If the wallet owner dies without disclosing login details, it could result in the loss of some or all of the cryptocurrency. It also highlights the need for more diversification among businesses that convert cash into crypto. Due to competition, more businesses are needed to keep exchange fees low.

2.6 EMPIRICAL FINDINGS

Previous empirical research has attempted to show that the relationship between financial literacy and attitudes towards cryptocurrencies is moderated by a different perception of financial risk associated with cryptocurrencies compared with other tools replaced by those with the most education in financial planning. The study was conducted in three Asian countries and the results shed light on the demand for cryptocurrency in the general population and showed that it is largely driven by inexperienced users (Panos et al., 2020). A study done in the US titled *Is Bitcoin Real Money? A real currency acts as a medium of exchange, a store of value, and a unit of account, but bitcoin largely fails to meet these criteria.* Bitcoin has only achieved a low volume of transactions with consumers, which is on average much lower than daily transactions for some of the merchants accepting it. Bitcoin volatility is significantly higher than the volatility of widely used currencies, posing significant short-term risk to users. Bitcoin's daily exchange rate has almost no correlation with widely used currencies and with gold, which makes bitcoin useless for risk management and extremely difficult for its owner to hedge risks. Consumer prices in bitcoin require multiple decimal places with leading zeros, which confuses retail market participants. Bitcoin faces a daily risk of hacks and thefts, has no access to deposit insured banking systems, and is not used to identify consumer credit or loan contracts. Bitcoin seems to behave more like a speculative investment than a currency (Yermack, 2015). Cryptocurrencies are a difficult area of finance that requires additional attention from the academic community, as they can have a significant impact on society and the economy. This study was conducted in Saudi Arabia with the title *Perception of Cryptocurrency Acceptance* (Alaklabi and Kang, 2021). One study assessed the crypto knowledge of a select number of Malaysian subjects and examined several determinants and found that nearly three-quarters of the respondents knew about them, but no one owns even a single digital currency. Among the determinants, age group, ethnicity, and occupational status influenced respondents' perception of cryptocurrencies. If the government is interested in promoting the use of cryptocurrencies, the necessary exposure campaigns as well as ensuring control and security should be a top priority (Zubir et al., 2020b). Another study on understanding different risk perceptions and security behaviors of crypto-asset users at the University of Innsbruck, Austria (Abramova et al., 2021). An empirical study entitled *how energy sector leaders can make informed decisions during the blockchain adoption process* was done in Hawaii and the study offers a new model and research agenda to help executives and managers prepare for

blockchain adoption and make informed decisions to speed up the adoption process(Farahmand and Farahmand, 2019).

A study conducted in Kenya assessed the perceptions and aspirations of millennials towards different types of investment assets, with a particular focus on cryptocurrencies, and found that despite the stagnation of government and regulation of cryptocurrencies, they find that millennials' awareness and desire to invest in this category is increasing(Bhilawadikar and Garg, 2020). In kingdom of Saudi Arabia a research was conducted which aims to determine the role of the leadership and potential benefits that blockchain adoption may bring to SME financing in the Kingdom, as well as the foreseeable challenges that may hinder small businesses from benefiting from the adoption of blockchain. It is interesting aspect to see how leadership manages to adopt new changes amid several challenges and threats. The article also outlines policy and regulatory trends that SMEs can save operating costs and improve efficiency, thereby increasing transparency and easier access to funds. Digital technology and creative business models have the potential to help narrow the financing gap for SMEs. The study provides recommendation that there is a dire need to pay attention on the complete mechanism of the SME's in order to support them as well as promote them to show their distinction in the contribution of social and economic development. The study also provides implications for the financial institutions, government agencies and society to come forward equally for the common interest(Alshareef and Tunio, 2022).

In another study conducted with young Kenyans, panel data of four different crypto stocks, transaction fees and volume over a sixyear period were studied. The results show a relationship between the number of cryptocurrency transactions, their prices and transaction costs. This research has also demonstrated the extent to which young people in Kenya know and use cryptocurrencies(Kamau, 2022). The researcher failed to get emprical researches done in Ethiopia about cryptocurrency and leaders knowledge or attitude.

CONCEPTUAL FRAMEWORK

Based on the KAP model the link between an individual's knowledge, attitudes, & practices to understand the process of behavioral and social change (Singhal, Rao, & Pant, 2006). Although various researchers have proposed different existing theoretical models of the knowledge-attitude-practice relationship, the most frequently applied ordering of the KAP variables is the cognitive model (Valente, Parades, & Poppe, 1998). This theoretical model argues that individuals first learn about a practice, then develop a positive attitude toward it, and after passing through these stages, engage in the behavior. The theory of planned behavior (TPB) is another cognitive theory by Ajzen that proposes an individual's decision to engage in a specific behavior, intentions are assumed to capture the motivational factors that influence behavior; they are indications of how hard people are willing to try, of how much of an effort they are planning to exert, in order to perform the behavior. As a general rule, the stronger the intention to engage in a behavior, the more likely should be its performance (Ajzen et al., 2011).

The KAP paradigm postulates that Bank leaders knowledge, attitudes, and practices a mix of important constructs—lead to likelihood of action. This paradigm defines knowledge as true information gained through education and experience. The notions of familiarity and awareness was included in knowledge. The elements of perceived benefits, perceived complexity, perceived social acceptability, agreement, motivation, and result anticipation were all included in the definition of attitudes as an affect (an emotion, feeling, or desire). Practices which is the psychomotor part was seen as having the ability to use cryptocurrency for certain aim. The researcher of this study has presented a conceptual framework in diagram form so as to show a profound understanding of a research questions. It was based on the assumption that to examine about cryptocurrency; it is important to investigate the knowledge, attitude and practices in the area since incorporating this variables would give us clear picture about the issue. Cryptocurrency was the key concern of the study and the researcher aimed exploring about the main issue based on the three variables; knowledge, attitude and practices. These three variables were vital in order to get full image regarding the main issue of the study. Acquiring knowledge leads to generating attitude and which inturn lead to forming practice/behavior at the end. Each of these variables have direct impact on the likelyhood of taking any actions related to cryptocurrency.

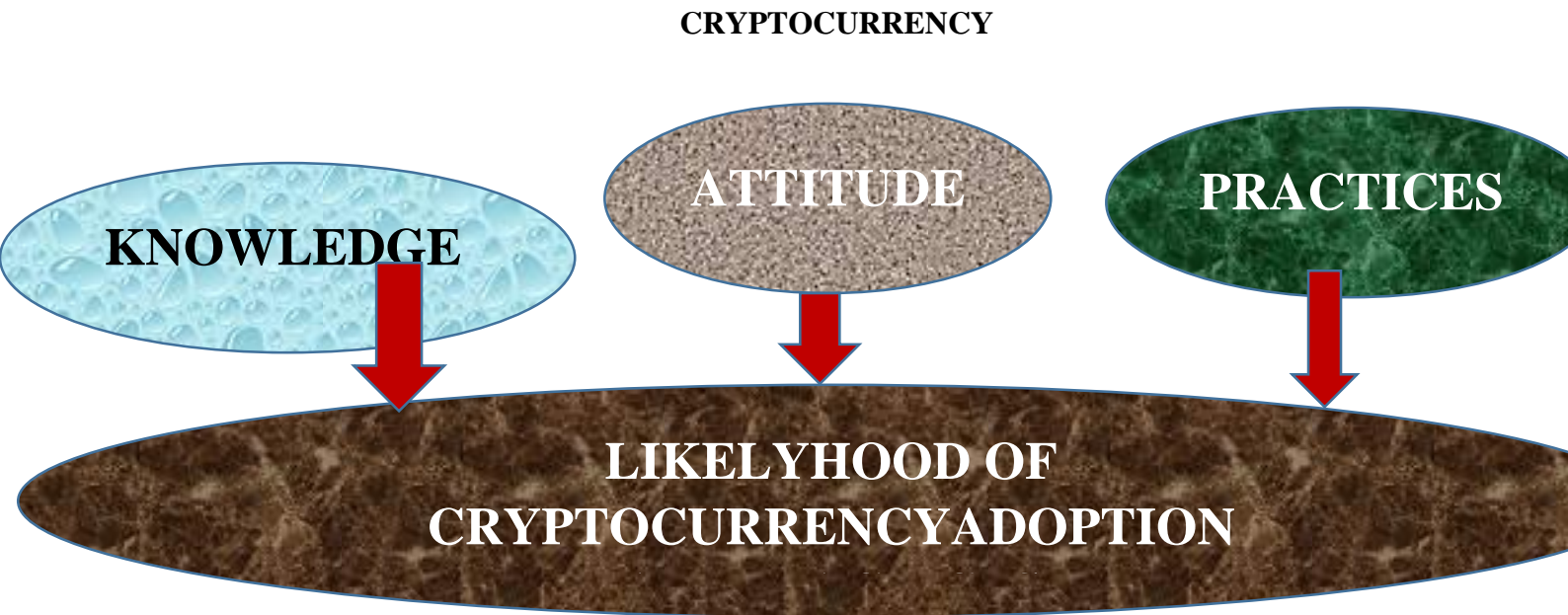


Figure 1; Conceptual framework on knowledge, attitude and practices interaction

Source: synthesized by the author based on literatures (Chatterjee, et al.,2009)

CHAPTER THREE

3 RESEARCH METHODOLOGY

In order to achieve the aim; investigation of knowledge, attitude and practice; the researcher created a survey instrument which was standardized questionnaire. The questionnaire was divided into 4 sections. The first section was focused on demographic data including gender, age, education, and employment. Gender, age, income and education was recorded as stated by the respondent. The second section measured knowledge by asking participants whether certain assertions are Yes or No. The elements of perceived benefits, perceived complexity, perceived social acceptability, agreement, motivation, and result anticipation was all included in the assessment of attitude as an affect (an emotion, feeling, or desire). This third section used a 5-point Likert scale (1 -Strongly Agree, 2 -Somewhat Agree, 3 -Neutral, 4 -Somewhat Disagree, 5 -Strongly Disagree) to examine attitudes and determine how much respondents agreed with various assertions concerning how cryptocurrency affected the banking business and the national economy as general. Practices was seen as having the ability to use cryptocurrency for certain aim; so the fourth section has assessed practices. Practices was assessed using a mixtures of questions and multiple alternatives. Together, all the above four section concepts have provided the likelihood of action and the present availability of cryptocurrency as well as the method used for execution. All the data was narrated using descriptive statistics namely percentage, mean etc to draw conclusion and provide recommendation.

3.1 STUDY AREA AND PERIOD

According to the NBE 2021/ 2022 report there are two governmental and 23 private banks in Addis Ababa and there are 466 branches of governmental banks and 2463 private bank branches in Addis Ababa. The study was conducted from May to early June, 2023. The reasons private banks selected were primarily, they give most of the banking service in the city and secondly, due to their administration flexibility they are early adopter of technologies in the sector and lastly unlike mass -market retail banking, private banking focuses on providing more personalized financial services to its clients, through banking personnel specifically dedicated to providing such individual services. Because of the above reasons private banks most likely accept and implement new technologies fastly.

3.2 RESEARCH DESIGN AND APPROACHES

In this research a descriptive quantitative research design was used to examine the Knowledge, Attitude and Practices of private bank managers towards cryptocurrencies. According to Gall et al (Nassaji, 2015) the goal of a descriptive research is to describe a phenomenon and its characteristics. This type of research design is more concerned with what rather than why something has happened. Therefore, questionnaire is often used to gather data. Moreover (Research Cloud,2021) state that a descriptive research design involving a range of quantitative research methods to collect data that aids in accurately describing a research problem. Consequently, the researcher of this study had took a particular unit which was to investigate the Knowledge, Attitude and Practices of private bank leaders in Addis Ababa towards cryptocurrencies and describe the phenomenon or facts.

3.2.1 TARGET POPULATION AND SAMPLING

Target population: All private bank leaders who were working in Addis Ababa. According to the NBE 2021/ 2022 report there were two governmental and 23 private banks in Addis Ababa and there were 466 branches of governmental banks and 2463 private bank branches in Addis Ababa. The study was conducted on private bank leaders from mid of May to early June, 2023.

Samples:The sample was selected using systematic random sampling method which was calculated by dividing target population by sample population to get the interval that is $7(2463/344)$. The total number of private banks in Addis Ababa (2463) divided by the sample size(344) gave us the sampling interval(7). The unit of analysis was each individual leaders from the private banks which inturn explains the number of branches are equivalent to number of unit of analysis because one leader was taken from each branches. The first sample was selected by lottery method from the first seven private bank branches and add seven to get the next one.

By using NBE data as sampling frame, 344 private bank leaders were selected using simple random sampling method.

3.2.2 SAMPLING PROCEDURES

The population of this research were all private bank leaders currently working in Addis Ababa. According to the NBE 2021/ 2022 report there were 2463 private bank branches in Addis Ababa. The sample size was determined based on 95% confidence interval and 5% margin of error using Slovin's formula.

N

$[1+N(e)^2]$

Where

n = Sample size

N = Population

e = Margin of error

N= 2463

e = 0.05

$n = 2463/1+2463(0.05)^2$

n = 344

so the sample size of this research was 344 private bank leaders

3.2.3 DATA COLLECTION INSTRUMENT

The researcher used both primary and secondary data source during the conduction of this research. Primary data were collected using a structured pretested interviewer administered questionnaire. Secondary data source were used during literature review and to know the number of private banks in Addis Ababa from NBE reports. Four Bsc degree holder data collector professionals were trained about data collection procedures. Finally, data was collected through interviewer administered technique.

3.2.4 DATA COLLECTION AND DATA COLLECTION PROCEDURE

Data collection was done by using a pre tested structured questionnaire. A pre test was carried out on 12 private bank leaders which were 5% of the sample size two days prior to actual data collection date. After making necessary correction to the questionnaire, the actual data collection was undertaken on participants other than those included on the pre test. The pretesting helped the researcher to provide the most direct evidence for the validity of the questionnaire and to determine if respondents understand the questions as well as whether they were willing to be interviewed and had the information that questionnaire requires. One respondents were selected from each brach in the sample and it took 15 days to complete the data collection. Four Bsc holder data collector professsionals were participated in the data collection process and the principal investigator as supervisor for the whole process.

3.2.5 DATA QUALITY CONTROL

Training was given for four data collectors. The data was collected after pretesting the instrument. Regular supervisions were made by supervisor. The collected data was reviewed and checked for completeness and accuracy by supervisor. To assure the validity of the data collection tool, it was reviewed by the advisors for any possible input. To check the validity of the tools pretesting was done in 12 bank leaders which were 5% of the samples and the pre-tests provided the most direct evidence for the validity of the questionnaire data. Cronbach's alpha measure was used to assess the reliability, or internal consistency, of a set of test items. A three-part of questionnaire was tested. It was done using SPSS version 20 and the result as follows;

The knowledge subscale consisted of 12 items ($\alpha = .729$),

The Attitude subscale consisted of 8 items ($\alpha = .907$), and

The Practice subscale consisted of 9 items ($\alpha = .751$).

The overall result showed that Cronbach's alpha is 0.795 which means the tools reliability was good and acceptable.

3.2.6 DATA ANALYSIS

The researcher used interviewer administered questionnaire to collect the data. After checked for the completeness of the data, it was entered in to SPSS version 20 for further possible analysis. Descriptive statistics was used as a summary measures. In order to provide statistically relevant results, the researcher has done the following:

- The uncompleted surveys were erased and thus excluded from analysis.

- The answers were checked for consistency and completeness

3.3 ETHICAL CONSIDERATION

The study proposal was reviewed and get ethical clearance from Addis Ababa university; School of Commerce; department of Business Administration and Information System. Data was collected after taking informed consent from the respondents. All the information gathered were kept confidential.

CHAPTER FOUR

4 DATA PRESENTATION, ANALYSIS AND DISCUSSION

The study was conducted in all sub cities in Addis Ababa city administration. The response rate of this study was 94%. A total of 344 questionnaire were distributed to bank leaders and 324 were returned completed and entered in to SPSS for analysis. The detail presentation and analysis of the study is presented as follows;

4.1 SOCIO -DEMOGRAPHIC DATA OF THE RESPONDENTS

Table 1 Socio -demographic characteristics

Characteristics	Categories	Frequency	Percentage
Sex	Male	242	74.7
	Female	82	25.3
Age Categories	Age 30 years old and less	215	66.4
	Age 31 through 44 years old	105	32.4
	Age 45 through 64 years old	4	1.2
	Age 65 years old and above	0	0
Educational status	Diploma	2	.6
	Bachelor Degree	240	74.1
	Masters and above	82	25.3
Marital status	Never married	152	46.9
	Currently married	162	50.0
	Separated	4	1.2
	Divorced	6	1.9
Monthly Income	Monthly Income 15000 birr and less	9	2.8
	Monthly Income 15001 through 20000 birr	86	26.5
	Monthly Income 20001 through 30000 birr	161	49.7
	Monthly Income 30001 birr and more	68	21.0

Totally 324 respondents participated in the study. Concerning the sex of the respondents 75% were male. Almost 66% of participants were age 30 years old or less. Regarding the educational status about 74% of the respondents have bachelor degree and 25% have post graduate degree and above. Most of the participants which were 47% have never been married while 50% were currently married. Regarding the income almost half of the participant had monthly income between 20,001 through 30,000 birr and about 21% of the respondents had monthly income more than 30,000 birr. (See Table 1 above)

4.2 KNOWLEDGE ABOUT CRYPTOCURRENCY

Table 2 knowledge about cryptocurrency

Characteristics	Categories	Frequency	Percentage
Have you ever heard about cryptocurrency?	Yes	287	88.6
	No	37	11.4
If your answer is yes from what source you got the information	Training	68	21.0
	Social or Mass Media	150	46.3
	Friends	47	14.5
	Journals	9	2.8
	Others(Specify)	13	4.5
Have you ever heard about cryptocurrency mining?	Yes	189	58.3
	No	135	41.7
How much would you say you know about cryptocurrency and how they work?	Not at all familiar	81	25.0
	Slightly familiar	147	45.4
	Moderately familiar	80	24.7
	Very familiar	16	4.9
Have you ever heard about Blockchain technology?	Yes	158	48.8
	No	166	51.2
Have you ever heard about digital wallet?	Yes	226	69.8
	No	98	30.2
	Yes	134	41.4

Have you ever heard about public or private key	No	190	58.6
Have you ever shared information about cryptocurrency to others?	Yes	139	42.9
	No	185	57.1
Do you want to learn about cryptocurrency?	Yes	248	76.5
	No	76	23.5
Do you know any person who have success in cryptocurrency?	Yes	153	47.2
	No	171	52.8
Do you think it is necessary to have cryptocurrency education facility in the city?	Yes	260	80.2
	No	64	19.8
Do you want to participate in cryptocurrency business if you get the opportunity?	Yes	238	73.5
	No	86	26.5

The number of respondents who ever heard about cryptocurrency were 88.6%. Most of them get the information from social media and mass media. About 58% of the participant heard about cryptocurrency mining and 45% believes they slightly know about cryptocurrency and how they work. Regarding the blockchain technology majority 51% don't know anything about it and how it works. The result of this study showed that 52% of the respondents have adequate knowledge about cryptocurrency which is similar to the result found in a study conducted in kenyan youth about awareness and participation of youth in cryptocurrency and 53% of the participant responded that they had awareness and inclined to use cryptocurrency(Kamau, 2022). The similarity might be due to regional proximity and the target populations in both cases can understand the technology easily. An other study assessed the awareness of cryptocurrencies among selected Malaysian public and tested certain determinants and found almost three quarter of the respondents were aware of them but none is owning even one digital currency. Among the determinants, age group, ethnicity and occupation status were found to have influenced respondents' awareness about cryptocurrencies(Zubir et al., 2020b). This shows that the result found in this study regarding awareness which is 52% is much lower than that of the Malaysian. The differences might be due to inadequate levels of information, the difference in the set up the study was conducted, limited sources of information, inadequate involvements of media and other concerned body to inform the community on opportunities

and risk factors associated with cryptocurrency in Ethiopia as compared to other countries. Most of the respondents about 70% know about digital wallet but 58% don't know what public or private keys are in cryptocurrency. Seventy six percent of the respondents want to learn about cryptocurrency but more than half of them don't know any person who have success in cryptocurrency. About 80% want to have cryptocurrency education facility in the city and 73% would like to invest in cryptocurrency business if they get the opportunity to do so. (See table 2)

4.3 ATTITUDE TOWARDS CRYPTOCURRENCY

Table 3 Attitude towards Cryptocurrency

Characteristics	Categories					Mean
	SD	D	N	A	SA	
Cryptocurrency is real money	44	44	82	115	39	3.12
Cryptocurrency is the future of finance	23	21	90	126	64	3.56
Cryptocurrency is risky investment	15	28	59	148	74	3.73
Adopting cryptocurrency will be beneficial	17	44	94	130	39	3.4
Bitcoin will be the dominant currency in years to come	11	42	111	121	39	3.42
Cryptocurrency should be legalized in Ethiopia	30	60	87	105	42	3.21
Different cryptocurrency can co exist in our daily life	24	36	107	118	39	3.34
Cryptocurrency can bring job opportunities in the city	27	36	68	158	35	3.43

Keys;

SD= Strongly Disagree

A= Agree

SA= Strongly Agree

D= Disagree

N=Neutral

The participants attitude towards whether cryptocurrency is real money were about 52% strongly disagree, disagree or have neutral stand. Majority(59%) believes that cryptocurrency is the future of finance and about 69% responded that cryptocurrency is risky investment. Regarding adoption of cryptocurrency most agreed that it will be beneficial. A similar study was conducted in Malaysia college students who were enrolled in a variety of programs including engineering, medicine, science, the arts, and humanities, participated in a study. The study's goals were to confirm the relationship between attitude and cryptocurrency adoption as well as the relationship between awareness and attitude toward cryptocurrencies. According to the study's findings, although there was a high degree of knowledge of cryptocurrencies, there was little enthusiasm for their adoption because of things like volatility and regulation(Ku-Mahamud et al., 2019).

According to this study's findings, 36% of respondents were in support of cryptocurrencies, which is much less than the percentage found in research of a similar nature conducted in other nations. For instance, a study on the effects of cryptocurrencies in Zimbabwe came to the conclusion that there were numerous meanings associated with cryptocurrencies, it was advantageous to embrace cryptocurrencies, and there were many problems associated with doing so. About 60% of the participants in the study conducted in Zimbabwe had good attitudes about cryptocurrencies, and the study's findings suggested that banks in Zimbabwe should accept cryptocurrencies and develop them(Mazikana, 2018). If cryptocurrencies are adequately controlled by the regulatory organizations and the general public is informed on the subject, people's perceptions about utilizing cryptocurrencies as a means of exchange will change. In this study forty five percent think that cryptocurrency should be legalized in Ethiopia. Similar research on legality carried out in Indonesia demonstrated that using cryptocurrencies as money was against the law. Even though the issuance of such cryptocurrency was subject to international relevant laws, the participation of an Indonesian citizen in the investment in the form of cryptocurrency might be seen as against public policy(Widjaja, 2019). This might be due to the nature of cryptocurrency which is decentralized and government can not have control like that of fiat currency. About 49% believes that Bitcoin will still be the dominant cryptocurrency in the future and half of the participant think different cryptocurrency can coexist in our daily life. Sixty percent believes that Cryptocurrency can bring job opportunities in the city. (See table 3 above)

4.4 PRACTICES OF CRYPTOCURRENCY

Table 4 Cryptocurrency Practices

Characteristics	Categories	Frequency	Percentage
Have you ever invested in cryptocurrency	Yes	47	14.5
	No	277	85.5
Which cryptocurrency do you invest in currently?	Bitcoin	25	53.2
	Ethereum	10	21.2
	Dogecoin	7	14.9
	Others(USDT,Cardano)	5	10.7
What apps,if any, do you use for investing?	Binance	30	63.8
	Trust Wallet	5	10.6
	Blockchain	5	10.6
	Coinbase	3	6.3
	Others	4	8.5
The reason behind people choose cryptocurrency over country currency?	Data privacy concern	29	9.0
	Government regulation	78	24.1
	Transaction freedom	124	38.3
	Security issues	12	3.7
	Physical cash too strong to handle	60	18.5
	Others	21	6.5
How do you think people making money from cryptocurrency?	Investment and Holding	161	49.7
	Trading	88	27.2
	Mining	26	8.0
	Others	49	15.1
Would you like to have cryptocurrency asset?	Yes	219	67.6
	No	105	32.4
Do you believe that this is the right time to involve in cryptocurrency?	Yes	234	72.2
	No	90	27.8
	Fear of losing money	145	44.8

What if any thing that stops you from investing in cryptocurrency?	Negligence	41	12.7
	Lack of awareness	115	35.5
	Lack of access	17	5.2
	Others	6	1.9

When we assess the practices of the respondents on cryptocurrency only 14.5% had invested in cryptocurrency and most of the investment was on Bitcoin(53%). About 64% used Binance application for investment and trading. The top reasons behind people choose cryptocurrency over country currency in the order were transaction freedom, government regulation and physical cash too strong to handle as responded by the participant. Good practice of cryptocurrency is found to be only 14.5%. This very low compared to a study conducted in the university of Innsbruck in which 78% of the participant have good practice of cryptocurrency assets. The study offers quantitative findings from a survey of 395 participants who were selected using a unique blend of deep and wide sampling the way that crypto-assets link financial prosperity to the confidentiality of individual keys. End-user security has previously been the subject of empirical studies from both the technological and organizational angles. However, the relationship between people's perceptions of danger and security behavior was often obscured by the heterogeneity of the subjects. The variability of the participants in small samples frequently concealed behavior(Abramova et al., 2021). The difference in practice level might be due to lack of access, level of understanding, study set up and country's level of development. This research showed that the major hindrance to adoption of cryptocurrency were fear of losing money and lack of awareness which covers about 45% and 36% respectively. Half of the participants think people making money from cryptocurrency through investment and trading. About 67% would like to have cryptocurrency asset and 72% responded that this is the right time to involve in cryptocurrency business. The participant answered the hindrance to cryptocurrency investments in the respective order are fear of losing money, lack of awareness and negligence. (see table 4 above)

CHAPTER FIVE

5 SUMMARY CONCLUSION AND RECOMMENDATION

5.1 SUMMARY

The overall result showed that 52% of the respondents have adequate knowledge about cryptocurrency and about 36% have favorable attitude towards cryptocurrency. Good practice of cryptocurrency is found to be only 14.5% and the major hindrance to adoption of cryptocurrency were fear of losing money and lack of awareness which covers about 45% and 36% respectively (Kassahun and Mekonen, 2017).

Table 5 Summary of findings

Characteristics	Categories	Frequency	Percentage
Adequate knowledge of cryptocurrency	Yes	168	52
	No	156	48
Favorable attitude towards cryptocurrency	Yes	117	36
	No	207	64
Good practice of cryptocurrency	Yes	47	14.5
	No	277	85.5
Hindrances to cryptocurrency adoption	Fear of losing money	145	44.8
	Negligence	41	12.7
	Lack of awareness	115	35.5
	Lack of access	17	5.2
	Others	6	1.9

In this research, data analysis was performed using frequency and percentage in order to answer the research questions. In other words, quantitative data analysis method was employed to address the research objectives.

The first research question focused on exploring the knowledge or awareness of cryptocurrencies among private bank leaders. Results of the study showed that 52% of the respondents have adequate knowledge about cryptocurrency. This finding agrees with the finding of the previous study which was conducted in Kenyan youth about awareness and participation of youth in cryptocurrency and 53% of the participants responded that they had awareness and inclined to use cryptocurrency (Kamau, 2022). On the other hand, a study

assessed the awareness of cryptocurrencies among selected Malaysian public and tested certain determinants and found almost three quarter of the respondents were aware of them but none owns even one digital currency. Among the determinants, age group, ethnicity and occupation status were found to have influenced respondents' awareness about cryptocurrencies(Zubir et al., 2020a). This shows that the result found in this study regarding awareness have much lower than that of the Malaysian.

In short, the outcome of this research disclosed that the respondents have ample knowledge about cryptocurrency, but their awareness regarding block chain technology, majority of them don't know anything about it and how it works.

The second research question sought to reveal the attitude of private bank leaders towards cryptocurrencies. Thus, the findings indicated that only about 36% of the respondent have favorable attitude towards cryptocurrency which is much lower than similar studies in another country. For example a study about the impact of cryptocurrency in Zimbabwe concluded there were many meanings attached to cryptocurrency, it was beneficial to adopt cryptocurrency. In this study about 60% of the participant have favorable attitude towards cryptocurrency and the study recommended that banks in Zimbabwe needed to adopt cryptocurrency and banks should enhance cryptocurrency(Mazikana, 2018).

In brief, majority of the bank leaders in this study have deprived attitudes about cryptocurrency which might be due to lack of awareness about it and how it works.

The third research question aimed to identify major hindrances and setbacks deterring adoption of cryptocurrencies in the sector. The result of this particular research question showed that the four major hindrances to adoption of cryptocurrency were fear of losing money, lack of awareness, lack of access and negligence. We can deduce from this result that the adoption process of cryptocurrency has burdens.

The fourth or the last research question was designed to detect the practice towards cryptocurrencies among private bank leaders. More than 80% of the respondent have never involved in cryptocurrency practically which will hinder the adoption of cryptocurrency in the banking industry. Good practice of cryptocurrency is found to be only 14.5%. This very low compared to a study conducted in the University of Innsbruck in which 78% of the participants' have good practice of cryptocurrency assets.

5.2 CONCLUSION

To the best of researchers knowledge, this study is the first to examine the knowledge, attitude and practices towards cryptocurrency in Ethiopia. The findings in this study showed that many of the bank leaders are not familiar with latest technologies related to cryptocurrency and how it works which facilitates the adoption of cryptocurrencies. It is noted that the whole cryptocurrency idea is still new and the technologies behind is in a state of development but these technologies showed resilience since ever they were created. Majority of the bank leaders have poor attitudes about cryptocurrency which might be due to lack of awareness about it and how it works. More than 80% of the respondent have never involved cryptocurrency practically which will hinder the adoption of cryptocurrency in the country. The major hindrance to adoption of cryptocurrency were fear of losing money, lack of awareness, lack of access and negligence.

5.3 RECOMMENDATION

- The private bank leaders should increase their and their staffs awareness about cryptocurrency and how it works through training about cryptocurrency and Blockchain technology. The leaders knowledge will help to make informed decision about cryptocurrency in the banking industry.
- Those individuals and organizations in Addis Ababa who are already trained and working on cryptocurrency and related technologies should have awareness creation and training facility for individuals and groups who are interested in cryptocurrency and related issues; because about 76% of the respondent want to learn about cryptocurrency and about 80% want to have cryptocurrency education facility in the city
- The Ministry of Finance and NBE as these are the institutions which lead the banking industry at higher level; they should have departments which are working on and following up the growth of cryptocurrency and how to minimize the negative impact of cryptocurrency and how to use its advantage safely.
- Higher learning institutions should give cryptocurrency training as part of community service because about 76% of the respondent want to learn about cryptocurrency
- Government should work on the way cryptocurrency can be adopted in safest way before it creates huge financial problems as it is dominating the financial sector
- Upcoming researchers have to conduct further researches preferably explanatory researches about cryptocurrency and blockchain technology in different financial and governmental institutions

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ANNEX I QUESTIONNAIRE

Addis Ababa University, School of Commerce, Department of Business Administration and Information System; Questionnaire for Data Collection on Addis Ababa, May,2023

Consent form before conducting interview

Greeting:

Hello, my name is _____. I am working in the research team of Addis Ababa University. I would like to interview you a few questions about your knowledge, attitude, practices about cryptocurrency. The objective of this study is to investigate the Knowledge, Attitude and Practices of private bank leaders in Addis Ababa towards cryptocurrencies. Your cooperation and willingness for the interview is helpful in assessing issues related to the subject matter.

Benefit – the study may have no direct benefit for the participants. But the information generated will help individual, groups, institutions and policy makers for designing appropriate intervention.

Harm – the participants do not have any harm by participating to the study

Duration of the study –the study will be conducted for one month. Participants will be interviewed.

Duration of the interview- the interview may take 20- 30 minutes

Alternatives to participation- you do not have to take part in this research if you do not wish to do so and refusing to participate will not have any harm for you and your family.

If you have question unclear you have a right to ask clarification. If you have also a question that you don't want to answer you can skip it. You may stop participating in the research at any time.

Confidentiality: Your answers are completely confidential. Your name will not be written in this form and will never be used in connection with any information you tell us. All information given by you will be kept confidential.

Are you willing to participate in this study? 1. Yes 2. No

Written Consent for participant (English Version)

I have read this form or it has been read to me in the language that I understand. I understand all conditions stated above. Therefore, I am willing to participate in this study

Signature-----

Name of principal investigator:

Tilahun Desalegn

Address: Phone: +251901116673

Email – tiledes2000@gmail.com

Signature-----

Name of interviewer-----, Signature-----

Date of interview _____ Time started _____ Time finished _____

Section. I. Demographic data

- 1 Sex 1. Male 2. Female
- 2 Age in yearsyears
- 3 What is your educational status?
 - Diploma holder
 - Degree holder
 - Post graduate degree or above
- 4 Monthly income in birrBirr
- 5 Marital status
 1. Never married
 2. Currently married
 3. Separated
 4. Divorced
 5. Widowed
- 6 Working experiences in the banking industry..... in years

Section.II) Cryptocurrency Knowledge Associated:

Instruction; tick (X) the one that seems best for you in the box.

7	How you ever heard about cryptocurrency?	1.Yes	
		2.No	
8	If your answer is yes from what source you got the information?	1.Training	
		2.Mass or Social Media	
		3.Friends	
		4.Journals	
		5.Other(specify)	
9	How you ever heard about cryptocurrency mining?	1.Yes	
		2.No	
10	How much would you say you know about cryptocurrencies and how they work?	1. Not at all familiar	
		2.Slightly familiar	
		3.Moderately familiar	
		4.Very familiar	
11	How you ever heard about blockchain technology	1.Yes	
		2.No	
12	How you ever heard about digital wallet?	1.Yes	
		2.No	
13	How you ever heard about Public or Private Key?	1.Yes	
		2.No	
14	How you ever shared information about cryptocurrency to others?	1.Yes	
		2.No	
15	Do you want to learn about cryptocurrency?	1.Yes	
		2.No	
16	Do you know any person who have success cryptocurrency?	1.Yes	
		2.No	
17		1.Yes	

	Do you think it is necessary to have cryptocurrency education or awareness facilities in the city?	2.No	
18	Do you want to participate in cryptocurrency business if you get the opportunity?	1.Yes	
		2.No	

Section.III Cryptocurrency Attitude Associated Instruction; tick (X) the one that seems best for you.						
SN.	Variables	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
19	Do you agree that cryptocurrency is real money?					
20	Do you agree on cryptocurrency is the future of finance?					
21	Cryptocurrency is risky investment?					
22	Do you agree on adoption of cryptocurrency will be beneficial?					
23	Do you believe Bitcoin will still be the dominant currency in years to come ?					
24	In the case of Bitcoin, do you trust its technology in the long term					
	Should cryptocurrency be legalized in Ethiopia?					
25	Do you think different crypto-currencies can co-exist in our daily life					
26	Do you agree on cryptocurrency will bring job opportunities in the city?					

Section.IV Cryptocurrency Practices Associated

Instruction:-Choose and encircle the one that seems best for you from the alternatives

27	Have you ever been used or invested in cryptocurrency?	1.Yes	
		2.No	
28	Which cryptocurrencies do you invest in currently?	1.Bitcoin	
		2.Ethereum	
		Doge coin Cardanao	
		Others(specify)	
29	What apps, if any, do you use for investing?	1.Binance	
		2.Trust wallet	
		3.Blockchain	
		4.Coinbase	
		Others(specify)	
30	The reason behind people prefer cryptocurrency over country currency	1. Data privacy concern	
		2.Government regulation	
		3.Transaction freedom	
		4.Security Issues	
		5. Physical cash are too strong to handle	
		6.Others(specify)	
31	How do you think people make money from cryptocurrencies?	1.Investment and holding	
		2.Trading	
		3.Borrowing	
		4.Mining	
		5. Others(specify)	
32	Would you like to have cryptocurrency asset?	1.Yes	
		2.No	
33		1.Yes	

	Do you believe that this is the right time to involve in cryptocurency?	2.No	
34	What, if anything, stops you from investing in a new cryptocurrency?	1. Fear of lossing money	
		2. Negligence	
		3. Lack of awareness	
		4. Lack of access	
		5. Others(specify)	
35	In your opinion what are the challenges of adopting cryptocurrency?	1. Lack of Understanding of What Cryptocurrency is and How it Works	
		2. Risk of Volatility	
		3. Lack of Regulatory Frameworks	
		4. Security Risks	
		5. Taxation problems	
		6. Others(specify)	