A PROJECT REPORT ON

"<u>A study on customer awareness</u> and investors prospective towards crypto currency"

A Project Submitted to

University of Mumbai for Partial Completion of the Degree

of Bachelor in Commerce (Accounting and finance)

Under the Faculty of Commerce

By

'Chetan Jayaram Poojary'

T.Y.B.A.F (SEMESTER – VI

PRN.NO:. 2021016401615596

Under the Guidance of

'ASST. PROF. DR. KISHOR CHAUHAN'

JNAN VIKAS MANDAL'S

Mohanlal Raichand Mehta College of CommerceDiwali Maa

College of Science

Amritlal Raichand Mehta College of Arts Dr. R.T.

Doshi College of Computer Science

NAAC Re-Accredited Grade 'A+' (CGPA: 3.31) (3rd Cycle)Sector-

19, Airoli, Navi Mumbai, Maharashtra 400708



FEBRUARY, 2024.

JNAN VIKAS MANDAL'S



Mohanlal Raichand Mehta College of CommerceDiwali Maa College of Science Amritlal Raichand Mehta College of Arts Dr. R.T. Doshi College of Computer Science NAAC Re-Accredited Grade 'A+' (CGPA : 3.31) (3rd Cycle)Sector-19, Airoli, Navi Mumbai, Maharashtra 400708

CERTIFICATE

This is to certify that **Chetan Jayaram Poojary** has worked and duly completed his Project work for the degree of Bachelor in Commerce (Accounting & Finance) under the faculty of Commerce in the subject of **Project work** and his projectis entitled "<u>A study</u> <u>on customer awareness and investors prospective towards crypto currency</u>" under my supervision.

I further certify that the entire work has been done by the learner under my guidance and that no part of it has been submitted previously for any Degree or Diploma of any university. It is his own work and facts reported by his personal findings and investigations.

Guiding Teacher, ASST. PROF. Dr. KISHOR CHAUHAN

DATE OF SUBMISSION:

DECLARATION BY LEARNER

I the undersigned **Mr. Chetan Jayaram Poojary** hereby, declare that the work embodied in this project work titled as "<u>A study on investors prospective</u> towards crypto currency" Forms my contribution to the research work carried out under the guidance of **ASST. PROF. Dr. KISHOR CHAUHAN** is a result of my research work and has not been previously submitted to any other University for any other Degree/ Diploma or other University.

Wherever reference has been made to previous works of others, it has been indicated as such and included in the bibliography.

I, hereby further declare that all the information in this document has been obtained and presented by academic rules and ethical conduct.

Name and Signature of the learner:

CHETAN JAYARAM POOJARY

Name and signature of the Guiding Teacher:

ASST. PROF. Dr. KISHOR CHAUHAN

ACKNOWLEDGEMENT

I would like to acknowledge the following as being idealistic channels and fresh dimensions in the completion of this project.

I take this opportunity to thank the **University of Mumbai** for giving me the chance to do this project.

I would like to thank my **I/C Principal, Dr. B. R. Deshpande Sir** for providing the necessaryfacilities required for the completion of this project.

I take this opportunity to thank our Coordinator, for his moral support and guidance. Also, I thank all my other teachers for their indirect support.

I would like to express my sincere gratitude towards my project guide **Asst. Prof. DR. Kishor Chauhan** whose guidance and care made the project successful.

I would like to thank my **College Library**, for having provided various reference books and magazines related to my project.

Lastly, I would like to thank every person who directly or indirectly helped me in the completion of the project especially my Parents and Peers who supported me throughout my project.

EXECUTIVE SUMMARY



Crypto currency is a digital asset that uses cryptography to secure transactions and to control the creation of new units. It operates independently of central banks and is decentralized, meaning it is not controlled by any government or institution. The most wellknown crypto currency is Bitcoin, but there are thousands of other cryptocurrencies in circulation, each with their own unique features and characteristics. Cryptocurrencies can be bought and sold on exchanges and used as a form of payment for goods and services. They are often seen as a speculative investment due to their volatility, with their value fluctuating rapidly based on market demand. One of the key advantages of crypto currency is its ability to facilitate fast, secure, and low-cost transactions across borders without the need for intermediaries such as banks or payment processors. However, it also poses challenges such as regulatory uncertainty, security risks, and the potential for illegal activities.

As the crypto currency market continues to evolve, it remains to be seen how it will impact traditional financial systems and what role it will play in the future of finance. Crypto currency was first introduced with the creation of Bitcoin in 2009 by an unknown person or group of people using the pseudonym Satoshi Nakamoto. Bitcoin's design and underlying technology, known as blockchain, allow for secure and transparent transactions without the need for a central authority.

Since then, numerous other cryptocurrencies have emerged, including Ethereum, Ripple, and Litecoin, among many others. Each crypto currency has its own unique features and uses, with some designed for specific purposes such as smart contracts and decentralized applications. One of the key benefits of crypto currency is its potential to provide financial services to people who may not have access to traditional banking systems. It can also be used to facilitate cross-border transactions and to reduce fees associated with traditional banking systems. However, the lack of regulation in the crypto currency market has also raised concerns about its potential use in illegal activities such as money laundering and terrorism financing. Additionally, the volatile nature of crypto currency prices has led to concerns about its suitability as a store of value or medium of exchange.

Crypto currency transactions are secured through a complex process known as cryptography. This involves using mathematical algorithms to encode and verify transactions, ensuring that they are secure and tamper-proof. Transactions are recorded on a decentralized ledger known as a blockchain, which is maintained by a network of nodes around the world. One of the key advantages of crypto currency is that it allows for greater financial privacy and anonymity than traditional banking systems. Transactions are pseudonymous, meaning that users can send and receive funds without revealing their identity. However, this has also led to concerns about its potential use in illegal activities, leading to calls for greater regulation and oversight.

Another challenge facing the crypto currency industry is the issue of scalability. As the number of users and transactions on the network increases, there is a risk of congestion and slower transaction times. Developers are working on solutions such as offchain transactions and increased block sizes to address this issue.

Despite these challenges, the adoption of crypto currency is growing rapidly, with more businesses and individuals accepting it as a form of payment. Major financial institutions are also beginning to explore the potential of blockchain technology and crypto currency, with some even launching their own digital currencies.

INDEX

| Sr. No. | Particular | Page No. |
|-----------|--|----------------|
| CHAPTER 1 | INTRODUCTION | <u>9 - 48</u> |
| 1.1 | Introduction to crypto currency. | 10 - 13 |
| 1.2 | Meaning. | 13 - 15 |
| 1.3 | Evolution of crypto currency. | 16-18 |
| 1.4 | What is use of crypto currency? | 19-20 |
| 1.5 | Components. | 21-22 |
| 1.6 | Factors Affecting. | 23-24 |
| 1.7 | History. | 25-26 |
| 1.8 | Who innovated crypto currency and why? | 27 - 29 |
| 1.9 | What is crypto mining? | 30-32 |
| 1.10 | Acts and Regulations. | 33 - 34 |
| 1.11 | Role. | 35 - 37 |
| 1.12 | Factors. | 38-41 |
| 1.13 | Advantages. | 42 - 44 |
| 1.14 | Disadvantages. | 45 – 47 |
| 1.15 | Remuneration. | 48-50 |
| CHAPTER 2 | RESEARCH METHODOLOGY | <u>51 – 56</u> |
| 2.1 | Research Methodology. | 52-53 |
| 2.2 | Sources of Data. | 54 |
| 2.3 | Objectives. | 54 |
| 2.4 | Scope of the Study. | 54 - 55 |
| 2.5 | Hypothesis. | 55 |
| 2.6 | Limitations. | 55 |
| CHAPTER 3 | REVIEW OF LITERATURE | <u>56 - 60</u> |

| CHAPTER 4 | DATA ANALYSIS AND INTERPRETATION | <u>61 – 78</u> |
|-----------|---|----------------|
| CHAPTER 5 | <u>FINDINGS, CONCLUSION,</u> <u>SUGGESTION</u> | <u>79 - 83</u> |
| | BIBLIOGRAPHY | <u>84 - 86</u> |
| | ANNEXURE | <u>87 – 91</u> |

<u>A study on customer awareness and investors</u> <u>prospective towards crypto currency</u>

CHAPTER NO 1

INTRODUCTION

1.1 Introduction of crypto currency

1.2 Meaning

1.3 Evolution of crypto currency

1.4 What is use of Crypto currency?

1.5 Components

1.6 Factors Affecting

1.7 History

1.8 Who innovative crypto currency and why?

1.9 What is crypto mining?

1.10 Acts and regulations

1.11 Role

1.12 Factors

1.13 Advantages

1.14 Disadvantages

1.15 Remuneration

1.1 INTRODUCTION OF CRYPTO CURRENCY



The study on customer awareness and investor perspectives towards crypto currency can provide valuable insights into the growing interest in digital currencies and their potential impact on traditional financial systems.

To conduct this study, researchers may use a combination of quantitative and qualitative methods, such as surveys, interviews, and focus groups, to gather data from both customers and investors.

The survey could include questions on customer awareness of cryptocurrencies, their level of knowledge, and their perception of the benefits and risks associated with investing in digital currencies.

Investors could be asked about their investment strategies, their risk tolerance, and their views on the potential of cryptocurrencies to disrupt traditional financial systems. Researchers could also explore the factors that influence investors' decisions to invest in cryptocurrencies, such as market trends, news media, and social networks.

To gather qualitative data, researchers could conduct in-depth interviews or focus groups with customers and investors. These methods could provide a deeper understanding of the motivations and attitudes of customers and investors towards cryptocurrencies, as well as their perceptions of the risks and opportunities associated with investing in this new asset class.

The findings of this study could have important implications for policymakers, financial institutions, and investors, as they seek to navigate the rapidly evolving landscape

of digital currencies. By better understanding the perspectives of customers and investors, policymakers and financial institutions can develop strategies to mitigate the risks and harness the opportunities presented by cryptocurrencies. A study on customer awareness and investors prospective towards crypto currency

In addition to the methods mentioned above, researchers conducting a study on customer awareness and investor perspectives towards crypto currency could also consider analyzing social media and online forums related to cryptocurrencies. This could provide insights into the sentiment and opinions of customers and investors towards digital currencies.

Furthermore, researchers could also examine the regulatory environment surrounding cryptocurrencies in different countries and the impact of regulatory changes on customer and investor attitudes towards digital currencies. This could help identify regulatory challenges and opportunities in the crypto currency space.

The study could also explore the impact of cryptocurrencies on traditional financial institutions, such as banks and investment firms. This could include analyzing the level of adoption of cryptocurrencies by these institutions and the potential risks and benefits associated with their integration into existing financial systems.

Finally, researchers could examine the potential impact of cryptocurrencies on the broader economy, including their potential to disrupt traditional payment systems and the implications of a shift towards decentralized financial systems.

Overall, a study on customer awareness and investor perspectives towards crypto currency can provide valuable insights into the evolving landscape of digital currencies and their potential impact on traditional financial systems.

Despite these challenges, the future of cryptocurrencies looks bright. As the technology continues to mature and evolve, it is likely that many of these challenges will be addressed through the development of new and innovative solutions. In the meantime, cryptocurrencies are likely to continue to grow in popularity and adoption, as more individuals and businesses recognize their potential to transform the financial landscape.

One of the key drivers of this growth is the increasing acceptance and adoption of cryptocurrencies by mainstream financial institutions and businesses. Major companies such as PayPal, Visa, and Mastercard have all announced plans to support cryptocurrencies, while large institutional investors such as BlackRock and JPMorgan Chase have also begun to invest in the technology. This growing acceptance and adoption is likely to drive increased demand for cryptocurrencies, as more individuals and businesses seek to take advantage of their benefits.

Another driver of growth is the increasing development and adoption of decentralized finance (DeFi) applications. DeFi platforms allow individuals to access financial services such as lending, borrowing, and trading without the need for intermediaries or centralized authorities. This has made DeFi a popular choice for individuals and businesses that value decentralization, transparency, and security. As more individuals and businesses recognize the potential of DeFi, it is likely that demand for cryptocurrencies will continue to grow.

In addition to DeFi, the development of other innovative applications and use cases for cryptocurrencies is also likely to drive growth and adoption. Non-fungible tokens (NFTs), for example, have already created new opportunities for artists, musicians, and other creatives to monetize their work and reach new audiences. As more innovative applications are developed and adopted, it is likely that cryptocurrencies will continue to grow in popularity and adoption.

Finally, the increasing recognition of cryptocurrencies as a hedge against inflation and economic instability is also likely to drive growth and adoption. As governments around the world continue to print money and accumulate debt, many individuals and businesses are turning to cryptocurrencies as a way to protect their wealth and assets. This has created a growing demand for cryptocurrencies as a store of value and hedge against economic uncertainty.

<u>1.2 MEANING</u>



Crypto currency is a digital or virtual currency that uses cryptography for security and operates independently of a central bank or government. It is a decentralized currency that uses a peer-to-peer network to enable transactions between parties without the need for intermediaries. Cryptocurrencies are typically based on block chain technology, which is a decentralized ledger that records all transactions made with the currency. Cryptocurrencies can be used to purchase goods and services, to invest in other cryptocurrencies or assets, or to trade on crypto currency exchanges. Some popular cryptocurrencies include Bitcoin, Ethereum, Litecoin, and Ripple. The value of cryptocurrencies can be volatile, and they are subject to market forces and investor sentiment.

Cryptocurrencies are often created through a process called mining, which involves using powerful computers to solve complex mathematical problems. The mining process validates transactions and creates new units of the crypto currency as a reward for miners.

One of the key features of cryptocurrencies is their decentralization, which means that they are not controlled by any central authority or institution. This gives users more freedom and privacy in their transactions, as well as protection from government intervention or currency manipulation. However, it also means that cryptocurrencies can be used for illegal activities, such as money laundering or financing terrorism, and that they are not subject to the same regulations as traditional currencies.

To further explain the meaning of crypto currency, it's important to understand how they differ from traditional currencies. Traditional currencies, such as the US dollar or the euro, are issued and regulated by central banks and governments. They are backed by the government's promise to honor the currency and provide stability in its value.

Cryptocurrencies, on the other hand, are not backed by any government or financial institution. They are created through a process called mining, which involves solving complex mathematical problems to validate transactions and add new units to the blockchain. The supply of most cryptocurrencies is limited, with a maximum number of units that can ever be created, which is often set in advance.

The value of cryptocurrencies is determined by supply and demand, just like traditional currencies. However, their decentralized nature and lack of regulation can lead to extreme volatility in their value. For example, the value of Bitcoin has experienced significant fluctuations, ranging from less than \$1 in its early days to over \$60,000 in 2021.

In addition to their use as a currency or store of value, cryptocurrencies can also have other uses and applications. For example, they can be used to power decentralized applications (dApps), which are built on blockchain technology and operate independently of central authorities. They can also be used to facilitate peer-to-peer transactions and to provide a secure and transparent record of ownership for assets such as real estate or intellectual property.

Another important aspect of crypto currency is the underlying technology that powers it, known as blockchain. Blockchain is a distributed ledger technology that records transactions in a secure and transparent manner, using cryptography to ensure the integrity and authenticity of the data.

Blockchains are decentralized and operate on a network of computers or nodes, with each node holding a copy of the entire blockchain. When a new transaction is added to the blockchain, it is broadcast to all nodes on the network, and each node verifies the transaction and updates its copy of the blockchain accordingly. This distributed nature of blockchain provides a high degree of security and transparency. Since each node on the network has a copy of the entire blockchain, it is difficult for any single entity to manipulate or corrupt the data. This makes blockchain a popular choice for applications that require secure and transparent record-keeping, such as supply chain management or voting systems.

In addition to its use in crypto currency, blockchain technology has many other potential applications. For example, it can be used to create decentralized autonomous organizations (DAOs), which are organizations that operate using smart contracts and are governed by their members rather than a central authority. It can also be used to create decentralized marketplaces or prediction markets, where users can buy and sell goods or make predictions about future events.

One of the most significant advantages of blockchain technology is its potential to reduce or eliminate the need for intermediaries in many types of transactions. For example, in a traditional real estate transaction, a buyer and seller would typically use a real estate agent or broker to facilitate the transaction and ensure that all parties are protected. With blockchain technology, however, it may be possible to create a secure and transparent record of ownership that can be used to facilitate the transaction without the need for a third party.

Overall, crypto currency and blockchain technology represent a new and innovative way of thinking about money, transactions, and record-keeping. While they still face many challenges and limitations, they have the potential to transform many industries and provide new opportunities for innovation and growth in the digital economy.

1.3 EVOLUTION OF CRYPTO CURRENCY

The evolution of crypto currency can be traced back to the creation of Bitcoin in 2009 by an unknown individual or group using the pseudonym Satoshi Nakamoto. Bitcoin was created as a decentralized and digital alternative to traditional currencies, with the goal of allowing individuals to transact with each other without the need for intermediaries such as banks or governments.

In the early days of Bitcoin, it was primarily used by a small group of enthusiasts and technologists. However, as the technology and its potential applications became more widely understood, interest in Bitcoin began to grow. In 2013, Bitcoin experienced a significant surge in value, reaching a peak of over \$1,000 per unit.

As interest in Bitcoin grew, other cryptocurrencies began to emerge. Litecoin, for example, was created in 2011 as a faster and more efficient alternative to Bitcoin. Ethereum was created in 2015 and introduced the concept of smart contracts, which are self-executing contracts with the terms of the agreement between buyer and seller being directly written into lines of code.

In the years since the creation of Bitcoin, the crypto currency market has grown significantly. As of September 2021, there were over 10,000 different cryptocurrencies in circulation, with a total market capitalization of over \$2 trillion. Bitcoin remains the largest and most well-known crypto currency, with a market capitalization of over \$800 billion.

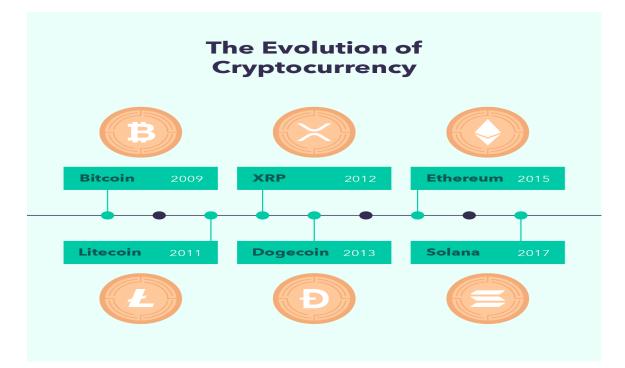
The evolution of crypto currency has also been marked by a number of significant developments and challenges. One of the biggest challenges facing the industry has been regulation. Governments and financial regulators around the world have been grappling with how to regulate crypto currency and ensure that it is not used for illicit activities such as money laundering or terrorism financing.

Another challenge facing the industry has been security. Because cryptocurrencies are stored digitally and are not backed by any government or financial institution, they are vulnerable to hacking and fraud. Several high-profile crypto currency exchanges have been hacked in recent years, resulting in the loss of millions of dollars' worth of crypto currency.

Despite these challenges, the crypto currency industry continues to evolve and innovate. New cryptocurrencies and applications are being developed all the time, and the technology has the potential to transform many industries beyond finance, such as supply chain management, voting systems, and more.

In addition, the evolution of crypto currency has also led to the development of new industries and job opportunities. Crypto currency mining, for example, has become a significant industry, with miners using specialized hardware and software to solve complex mathematical problems and earn new units of crypto currency as a reward.

Overall, the evolution of crypto currency has been marked by significant growth, innovation, and challenges. As the technology continues to evolve, it will be interesting to see how it develops and how it is adopted by individuals and industries around the world.



1. Bitcoin: Bitcoin was the first decentralized crypto currency created by an unknown person or group of people using the pseudonym Satoshi Nakamoto. Bitcoin uses a peer-to-peer network to enable transactions without the need for a central authority.

- 2. Altcoins: As Bitcoin gained popularity, other cryptocurrencies, known as altcoins, were created. Altcoins have different features and use cases than Bitcoin, such as faster transaction times or increased privacy.
- **3.** Initial Coin Offerings (ICOs): In 2017, the ICO boom began, where companies could raise funds by creating their own cryptocurrencies and selling them to investors. However, many of these ICOs turned out to be scams or failed projects, leading to increased regulation in the space.
- **4. Stablecoins:** To address the volatility of cryptocurrencies, stablecoins were created. Stablecoins are cryptocurrencies that are backed by a stable asset, such as the US dollar, to maintain a stable value.
- **5.** Decentralized Finance (DeFi): DeFi is a new area of finance that utilizes decentralized technologies, such as blockchain, to create financial products and services without intermediaries. Many DeFi protocols use cryptocurrencies as collateral or as the underlying asset.
- **6. Central Bank Digital Currencies (CBDCs):** Some governments and central banks are exploring the idea of creating their own digital currencies, known as CBDCs. CBDCs would be backed by the government and would be legal tender.

Overall, crypto currency has evolved from a fringe technology to a mainstream financial asset in a relatively short period of time. While there are still challenges to overcome, such as regulation and adoption, the potential for cryptocurrencies to disrupt traditional finance is significant.

1.4 WHAT IS USE OF CRYPTO CURRENCY

Cryptocurrencies have several uses, including:

- 1. Decentralized Transactions: Cryptocurrencies are decentralized, which means they are not controlled by any government or financial institution. This allows for transactions to be conducted without the need for intermediaries such as banks or other financial institutions.
- 2. Security: Cryptocurrencies are secured by advanced encryption techniques and are therefore very difficult to hack. Transactions made using cryptocurrencies are also very secure and can be conducted anonymously, making them ideal for people who value privacy.
- **3. Investment:** Cryptocurrencies are often seen as a potential investment opportunity because of their high volatility and potential for high returns. Many people invest in cryptocurrencies like Bitcoin, Ethereum, and Litecoin with the expectation that their value will increase over time.
- 4. Cross-border Transactions: Cryptocurrencies allow for fast and easy crossborder transactions without the need for currency exchange or other intermediaries. This makes them ideal for people who travel frequently or conduct business across borders.
- 5. Fundraising: Cryptocurrencies can be used to raise funds for various projects or causes. This is typically done through Initial Coin Offerings (ICOs), where new cryptocurrencies are issued and sold to investors to raise funds for a specific project or cause.
- **6. Decentralized and secure transactions:** Cryptocurrencies allow for peer-to-peer transactions without the need for intermediaries like banks or financial institutions.

This can be especially useful for individuals or businesses that want to make crossborder transactions quickly and securely.

- **7. Lower transaction fees:** Because there are no intermediaries involved in c ryptocurrency transactions, transaction fees can be significantly lower than traditional banking or financial services.
- **8. Privacy and anonymity:** Many cryptocurrencies, including Bitcoin, offer a high degree of privacy and anonymity, which can be appealing to individuals who want to keep their financial transactions private.
- **9. Store of value:** Some cryptocurrencies, such as Bitcoin, are seen as a store of value similar to gold or other precious metals. This is because they are limited in supply and can be used as a hedge against inflation.
- **10. Investment opportunities:** Many individuals see cryptocurrencies as a potential investment opportunity, with the potential for significant returns. However, it is important to note that cryptocurrencies are highly volatile and can be risky investments.
- **11. Micropayments:** Cryptocurrencies can enable micropayments, allowing for the exchange of very small amounts of money quickly and easily.
- **12. Programmable money:** Some cryptocurrencies, such as Ethereum, enable the creation of smart contracts, which are self-executing contracts that automatically execute the terms of an agreement when certain conditions are met. This opens up a wide range of potential applications beyond just financial transactions.

1.5 COMPONENTS OF CRYPTO CURRENCY



- 1. Cryptography: Cryptocurrencies use advanced cryptographic techniques to secure and verify transactions, as well as to control the creation of new units of the currency. This ensures that transactions are secure and private, and that the currency cannot be counterfeited or double-spent.
- 2. Decentralized Ledger: Cryptocurrencies use a decentralized ledger, such as the blockchain, to record and verify transactions. This means that the ledger is maintained by a network of nodes or computers, rather than a central authority, making it more secure and resistant to manipulation.
- **3. Consensus Algorithm:** Cryptocurrencies use a consensus algorithm to ensure that all nodes on the network agree on the state of the ledger. This is typically achieved through a proof-of-work or proof-of-stake mechanism, which requires nodes to perform complex calculations in order to add new transactions to the ledger.
- **4. Digital Wallet:** A digital wallet is a software application that allows users to store, send, and receive cryptocurrencies. Digital wallets are typically secured with encryption and can be accessed with a private key or password.

- **5. Mining:** Mining is the process of adding new transactions to the ledger and creating new units of the currency. This is typically done by nodes on the network that perform complex calculations to solve cryptographic puzzles. Miners are rewarded with new units of the currency for their efforts.
- 6. Blockchain Technology: Cryptocurrencies are based on blockchain technology, which is a decentralized and distributed digital ledger that records transactions across a network of computers. This technology allows for secure and transparent transactions without the need for intermediaries.
- 7. Cryptographic Algorithms: Cryptocurrencies use various cryptographic algorithms to secure transactions and prevent fraud. This includes algorithms like SHA-256 and Scrypt, which are used by Bitcoin and Litecoin respectively, and which help to secure the network by verifying transactions and preventing the creation of counterfeit coins.
- **8.** Wallets: Crypto currency wallets are digital wallets that store users' private keys, which are used to sign and verify transactions. Wallets can be software-based, such as a desktop or mobile app, or hardware-based, such as a USB device or smartcard.
- **9. Mining:** Mining is the process by which new units of a crypto currency are created and transactions are verified on the blockchain. Miners use specialized hardware and software to solve complex mathematical problems and earn new units of crypto currency as a reward.
- **10. Onsensus Mechanisms:** Consensus mechanisms are used to ensure that transactions are validated and added to the blockchain in a secure and efficient manner. Different cryptocurrencies use different consensus mechanisms, such as proof of work (PoW), proof of stake (PoS), and delegated proof of stake (DPoS).

1.6 FACTOR AFFECTING CRYPTO CURRENCY

Several factors can affect the value and adoption of cryptocurrencies, including:

- **1. Market Demand:** Like any asset, the value of cryptocurrencies is largely determined by supply and demand. When demand for a particular crypto currency increases, its value tends to rise, and vice versa.
- 2. Regulatory Environment: The regulatory environment can have a significant impact on cryptocurrencies, as governments around the world grapple with how to regulate this emerging technology. Regulations that are perceived as favourable to crypto currencies can lead to increased adoption and investment, while unfavourable regulations can have the opposite effect.
- **3. Technological Advancements:** As new technological advancements are made, cryptocurrencies may be able to offer new features and functionality, which can drive adoption and increase their value.
- **4. Security Concerns:** Security concerns, such as hacks or scams involving cryptocurrencies, can erode public trust in the technology and lead to decreased adoption and investment.
- **5. Media Coverage:** Media coverage can have a significant impact on the value and adoption of cryptocurrencies. Positive coverage can lead to increased adoption and investment, while negative coverage can have the opposite effect.
- 6. Economic and Geopolitical Events: Economic and geopolitical events, such as inflation, political instability, or economic downturns, can impact the value of cryptocurrencies as investors seek out alternative assets and safe havens for their investments.

- **7. Market Adoption:** Cryptocurrencies rely on market adoption to become widely accepted and valuable. As more businesses and individuals start to use cryptocurrencies, their value is likely to increase.
- **8.** Competition: Cryptocurrencies face competition from other cryptocurrencies and from traditional financial institutions. The success of a crypto currency depends on its ability to compete with other cryptocurrencies and provide unique benefits.
- **9. Technology Advances:** The technology behind cryptocurrencies is constantly evolving, with new innovations and improvements being made all the time. These advances can impact the value and adoption of cryptocurrencies.
- **10. Public Perception:** Public perception plays a key role in the adoption and success of cryptocurrencies. Negative news stories or public opinion can cause significant drops in the value of cryptocurrencies.
- **11. Economic Factors:** Cryptocurrencies are subject to many of the same economic factors as traditional currencies, such as inflation, interest rates, and global economic trends. These factors can impact the value of cryptocurrencies in the short and long term.
- **12. Security:** The security of cryptocurrencies is also an important factor. Cryptocurrencies can be vulnerable to hacks and other security breaches, which can impact their value and adoption.

Overall, the value and adoption of cryptocurrencies are influenced by a complex set of factors, including market demand, regulation, technology, security concerns, media coverage, and economic and geopolitical events.

1.7 HISTORY OF CRYPTO CURRENCY

Crypto currency is a digital asset designed to work as a medium of exchange, using strong cryptography to secure financial transactions, control the creation of additional units, and verify the transfer of assets. Here is a brief history of crypto currency:

- 1. **1998:** The first mention of crypto currency was in a paper titled "B-Money" by Wei Dai. Dai proposed a digital currency system that used cryptography to control the creation and transfer of money.
- 2. 2008: The first crypto currency, Bitcoin, was created by an unknown person or group using the pseudonym Satoshi Nakamoto. Nakamoto's white paper, titled "Bitcoin: A Peer-to-Peer Electronic Cash System," outlined the basic principles of the currency and its decentralized, trustless nature.
- **3. 2009:** The first Bitcoin transaction took place between Nakamoto and a programmer named Hal Finney. Finney was the recipient of the first Bitcoin transaction and is widely considered to be the first person to embrace the crypto currency.
- **4. 2011:** Litecoin, a crypto currency created by Charlie Lee, was launched. Litecoin was designed to be faster and cheaper than Bitcoin and quickly became one of the most popular cryptocurrencies.
- **5. 2012:** Ripple, a digital currency and payment protocol, was released. Unlike Bitcoin and Litecoin, Ripple was designed to be used by financial institutions and banks, and its primary purpose was to facilitate cross-border payments.
- 6. 2013: Bitcoin's value increased from \$13 to over \$1,000, attracting more attention from investors and the general public. Other crypto currencies such as Namecoin, Peercoin, and Feathercoin were also introduced.

- **7. 2014:** The crypto currency exchange, Mt. Gox, which was handling the majority of Bitcoin transactions, filed for bankruptcy after being hacked and losing approximately 850,000 bitcoins.
- 8. 2015: Ethereum, a decentralized platform for building decentralized applications (DApps), was launched. Ethereum introduced the concept of smart contracts, which enabled developers to create custom contracts that could execute automatically when certain conditions were met.
- 2017: The crypto currency market experienced a massive bull run, with the value of Bitcoin soaring to over \$20,000. Other cryptocurrencies such as Ripple, Ethereum, and Litecoin also reached record highs.
- **10. 2018:** The crypto currency market experienced a significant downturn, with the value of Bitcoin dropping to less than \$4,000. Many other cryptocurrencies also experienced significant losses.
- **11. 2020:** Bitcoin's price rallied again, surpassing \$20,000 for the first time since 2017. This time, the rally was fuelled by institutional investment and increased interest from mainstream financial institutions.
- **12. 2021:** Bitcoin's price continued to rise, reaching an all-time high of over \$64,000 in April. Other cryptocurrencies such as Ethereum, Dogecoin, and Binance Coin also experienced significant gains. However, the market also experienced significant volatility, with prices fluctuating wildly.

Overall, crypto currency has come a long way since its inception, and it has sparked a revolution in the way we think about money and financial transactions. While there are still many challenges to overcome, the potential benefits of crypto currency are enormous, and it will undoubtedly continue to play a significant role in the future of finance.

1.8 WHO INVENTED CRYPTO CURRENCY AND WHY ?



Satoshi Nakamoto is the pseudonym used by the creator or creators of Bitcoin. The identity of Satoshi Nakamoto is not publicly known. One of the first major public investigations ended with Dorian Nakamoto being identified as Bitcoin's creator, but he continues to decline the claim.

The innovation of crypto currency can be attributed to a combination of technological advancements, economic and social factors, and the desire for a decentralized financial system.

One of the key technological innovations that made crypto currency possible is the development of blockchain, a distributed ledger technology that allows for secure and transparent record-keeping without the need for intermediaries. This technology allows for the creation of decentralized digital currencies that are not controlled by governments or financial institutions.

Economic and social factors also played a role in the development of crypto currency. The financial crisis of 2008 highlighted the flaws of the traditional banking system and led to a loss of trust in centralized financial institutions. This, in turn, created a demand for alternative financial systems that were more transparent and decentralized.

The desire for privacy and anonymity in financial transactions also contributed to the popularity of crypto currency. With traditional financial systems, transactions are often subject to government surveillance and monitoring. Cryptocurrencies offer a way to conduct transactions anonymously and without the need for intermediaries.

Individuals and teams who contributed to the development of cryptocurrencies were motivated by a range of factors, including a desire for financial freedom, a distrust of traditional financial institutions, and a passion for innovative technology. Some saw the potential for crypto currency to democratize finance and provide access to financial services for people who were previously excluded. Others were driven by the potential for blockchain technology to transform a wide range of industries beyond finance, from supply chain management to voting systems.

Overall, the innovation of crypto currency was driven by a combination of technological advancements, economic and social factors, and the desire for a more decentralized and transparent financial system

In addition to the factors mentioned above, the innovation of crypto currency can also be attributed to the development of cryptography, which provides a way to secure digital transactions and prevent fraud.

Cryptography involves the use of complex algorithms and mathematical formulas to encode and protect data. With the use of cryptography, cryptocurrencies are able to ensure the integrity of transactions and prevent unauthorized access to funds.

The decentralized nature of crypto currency also contributes to its innovation. Unlike traditional financial systems, which are centralized and controlled by a few large institutions, crypto currency is decentralized and operates on a peer-to-peer network. This allows for greater transparency and security, as well as a more democratic approach to financial transactions.

Another factor that has contributed to the innovation of crypto currency is the development of smart contracts. Smart contracts are self-executing contracts with the terms of the agreement written into code. They allow for secure and transparent transactions

without the need for intermediaries, and have the potential to revolutionize industries beyond finance, such as real estate, supply chain management, and intellectual property.

Finally, the innovative nature of crypto currency can be attributed to the large and diverse community of developers, investors, and enthusiasts who are passionate about the technology and its potential. This community is constantly working on new projects, improving existing cryptocurrencies, and exploring new use cases for blockchain technology.

Overall, the innovation of crypto currency is driven by a combination of technological advancements, economic and social factors, and the passion and creativity of its community. It represents a new way of thinking about finance and digital transactions, and has the potential to transform a wide range of industries and create a more equitable and democratic global economy.



<u>1.9 WHAT IS CRYPTO MINING</u>

Crypto currency mining is the process by which new crypto currency units are created and transactions are verified on a blockchain network. Here is a more detailed explanation of how crypto currency mining works:

Crypto currency mining requires specialized software and hardware: In order to mine cryptocurrencies, users must use specialized software and hardware, such as ASIC (Application-Specific Integrated Circuit) miners or GPU (Graphics Processing Unit) miners. These devices are designed to solve complex mathematical problems that are required to verify and record transactions on the blockchain.

Miners compete to solve mathematical problems: When a user wants to make a transaction on a blockchain network, that transaction is broadcast to all nodes on the network. Miners then compete to solve a complex mathematical problem associated with the transaction. The first miner to solve the problem and verify the transaction is rewarded with newly created units of the crypto currency.

Proof-of-work system: The process of solving mathematical problems and verifying transactions is known as "proof-of-work" and is used by many blockchain networks, including Bitcoin and Ethereum. Proof-of-work requires users to expend a significant amount of computing power and energy in order to participate in the network. This helps to maintain the security and integrity of the network by preventing malicious actors from gaining control of the network and manipulating transactions.

Mining rewards: As mentioned, miners who successfully solve the mathematical problem associated with a transaction are rewarded with newly created units of the crypto currency. The reward for mining can vary depending on the blockchain network, but typically decreases over time as the supply of the crypto currency increases.

Mining difficulty: The difficulty of mining is designed to increase over time, which means that it requires more computing power and energy to solve mathematical problems and verify transactions. This helps to prevent the creation of too many new units of the crypto currency and helps to maintain the scarcity of the crypto currency.

30

Cost of mining: Mining can be a profitable venture for those who are willing to invest in the necessary hardware and energy. However, as the difficulty of mining increases, the cost of mining also increases. In some cases, the cost of mining may exceed the value of the crypto currency being mined.

Environmental impact: Crypto currency mining can have a significant environmental impact due to the amount of energy required to power the computing equipment used in the process. In some cases, miners may use renewable energy sources to power their equipment, but many mining operations rely on non-renewable energy sources such as coal or natural gas. Some blockchain networks, such as Ethereum, are moving towards a proof-of-stake system that requires less energy and has a lower environmental impact than proof-of-work.

Mining profitability: The profitability of crypto currency mining depends on a variety of factors, including the cost of energy, the difficulty of mining, the price of the crypto currency being mined, and the efficiency of the mining equipment. As the price of cryptocurrencies fluctuates, the profitability of mining can also change rapidly.

Mining regulations: Crypto currency mining is a relatively new and rapidly evolving field, and regulations around mining activities can vary widely depending on the jurisdiction. In some cases, mining activities may be subject to regulation or licensing requirements, while in other cases, mining may be completely unregulated.

Overall, crypto currency mining is a critical component of many blockchain networks, providing a way to create new units of crypto currency and verify transactions while maintaining the security and integrity of the network. However, mining can be a resource-intensive process and as blockchain networks continue to grow and evolve, alternative methods of transaction verification, such as proof-of-stake, are being developed.

Mining pools: Mining pools are groups of miners who combine their computing power to solve mathematical problems and verify transactions more efficiently. When a mining pool successfully verifies a transaction, the rewards are split among the members of the pool based on their contribution to the mining effort. The difficulty of the mathematical problems that miners must solve is adjusted regularly to maintain a consistent rate of block creation. The Bitcoin network, for example, adjusts the difficulty every 2016 blocks (approximately every 2 weeks) based on the amount of computational power being used for mining.

Some crypto currencies are designed to be ASIC-resistant, meaning that they are designed to be resistant to specialized mining hardware like ASICs. This is done to make mining more accessible to individuals who may not have access to specialized hardware, and to prevent mining centralization by large mining operations.



1.10 ACTS AND REGULATIONS



The regulation of crypto currencies and crypto currency mining varies widely depending on the jurisdiction. Here are a few examples of some of the acts and regulations that may apply to cryptocurrencies and mining:

- 1. Financial Action Task Force (FATF): The FATF is an intergovernmental organization that sets global standards for anti-money laundering and counter-terrorism financing. In 2019, the FATF issued guidance for the regulation of cryptocurrencies, requiring that crypto currency exchanges and other service providers be subject to anti-money laundering and know-your-customer regulations.
- 2. Securities and Exchange Commission (SEC): In the United States, the SEC has taken an active role in regulating cryptocurrencies and initial coin offerings (ICOs), which are a type of fundraising mechanism used by some crypto currency projects. The SEC has issued guidance indicating that some cryptocurrencies may be considered securities and subject to securities laws and regulations.

- **3. European Union (EU):** The EU has proposed a set of regulations for cryptocurrencies and crypto currency exchanges, which would require that exchanges be registered and comply with anti-money laundering and know-your-customer regulations.
- **4. China:** In China, the government has taken a hard line on cryptocurrencies, banning initial coin offerings and crypto currency exchanges. Mining operations have also come under scrutiny, with some local governments ordering the closure of mining facilities due to concerns over energy consumption and environmental impact.
- **5.** Anti-Money Laundering (AML) and Know Your Customer (KYC) regulations: Many countries have implemented AML and KYC regulations to prevent money laundering and other illegal activities through cryptocurrencies.
- 6. Securities laws: In some countries, cryptocurrencies may be subject to securities laws if they are considered investment products. In these cases, companies that issue crypto currency may be required to register with regulatory agencies and comply with disclosure requirements.
- **7. Taxation laws:** Cryptocurrencies are subject to taxation laws in most countries. In some countries, cryptocurrencies are taxed as property, while in others they are taxed as currency.
- 8. Consumer protection laws: Consumer protection laws apply to cryptocurrencies just like any other product or service. This means that companies that sell crypto currency may be subject to laws related to advertising, fraud, and unfair business practices.
- **9. Data protection laws:** Cryptocurrencies may collect and store personal data, and companies that handle crypto currency must comply with data protection laws.

<u>1.11</u> ROLE OF CRYPTO CURRENCY

- 2. Decentralization: One of the most important features of cryptocurrencies is their decentralized nature. Unlike traditional currencies, which are controlled by governments and central banks, cryptocurrencies are based on a decentralized ledger system (blockchain) that allows for peer-to-peer transactions without the need for intermediaries.
- **3. Payment system:** Cryptocurrencies can be used as a means of payment for goods and services. This is particularly useful for cross-border transactions, as cryptocurrencies can be sent anywhere in the world instantly and at low cost.
- **4. Store of value:** Cryptocurrencies can be used as a store of value, much like traditional currencies or gold. Some investors view cryptocurrencies as a hedge against inflation or a way to diversify their investment portfolio.
- **5. Fundraising:** Cryptocurrencies can be used to raise funds through initial coin offerings (ICOs) or other fundraising mechanisms. This has the potential to democratize access to capital and allow for greater innovation and competition in the fundraising space.
- **6. Smart contracts:** Cryptocurrencies can be used to create and execute smart contracts, which are self-executing contracts with the terms of the agreement directly written into code. Smart contracts can be used to automate processes and reduce the need for intermediaries in various industries.
- **7. Financial inclusion:** Cryptocurrencies have the potential to increase financial inclusion by providing access to financial services to individuals and businesses that are currently underserved by traditional financial institutions.

- **8. Remittances:** Cryptocurrencies can be used to send and receive remittances, particularly for individuals who live and work in countries with unstable currencies or high remittance fees.
- **9. Micropayments:** Cryptocurrencies can enable micropayments, which are transactions of very small amounts of money. This can facilitate new business models and revenue streams, particularly in the digital economy.
- **10. Tokenization:** Cryptocurrencies can be used to tokenize assets, such as real estate, art, or intellectual property. This can increase the liquidity and accessibility of these assets, as well as enable fractional ownership and investment.



11. Privacy: Some crypto currencies, such as Monero and Zcash, offer increased privacy and anonymity compared to traditional payment systems. This can be particularly useful for individuals who value privacy or who live in countries with strict financial regulations.

- **12. Governance:** Cryptocurrencies can be used to create decentralized governance structures, allowing for more democratic decision-making and community control.
- **13. Gaming:** Cryptocurrencies can be used within video games and other online environments to facilitate in-game purchases and trading. This has the potential to create new revenue streams for game developers and increase player engagement.
- **14. Supply chain management:** Cryptocurrencies can be used to track and verify the authenticity of goods and products as they move through the supply chain. This can help to reduce fraud and counterfeiting, as well as improve transparency and efficiency.
- **15. Social impact:** Cryptocurrencies can be used for social impact initiatives, such as donating to charitable causes or providing financial assistance to individuals in need.

Overall, the potential uses of cryptocurrencies are vast and varied, and their adoption and development is still in its early stages. As the technology evolves and matures, it will be interesting to see how it continues to shape and disrupt various industries.

1.12 FACTORS OF CRYPTO CURRENCY

- 1. Supply and demand: As mentioned earlier, the balance of supply and demand is a fundamental factor in determining the price of cryptocurrencies. The supply of most cryptocurrencies is limited, with many having a set maximum supply cap that can never be exceeded. For example, the total supply of Bitcoin is capped at 21 million coins. This scarcity can increase the value of the crypto currency, especially if there is a high demand for it.
- 2. Market sentiment: The sentiment or mood of the market can also affect the value of cryptocurrencies. Positive news, such as the adoption of cryptocurrencies by a large company or government, can increase demand for the crypto currency and drive up its value. Conversely, negative news, such as a major hack or regulatory crackdown, can lead to a decrease in demand and a drop in the crypto currency's value. It is worth noting that market sentiment can change quickly and often unpredictably, leading to sudden spikes or drops in crypto currency prices.
- **3. Regulatory environment:** Governments and financial institutions have varying degrees of regulation and restrictions on cryptocurrencies, and these can significantly affect their value. For example, in some countries, cryptocurrencies are fully accepted and regulated, while in others, they are banned or restricted. A favourable regulatory environment can increase adoption and usage of a crypto currency, while a negative one can stifle its growth.
- **4. Technology:** The underlying technology of a crypto currency is an important factor in its value and adoption. For example, Bitcoin's blockchain technology has proven to be secure and reliable, which has contributed to its popularity and high value. On the other hand, cryptocurrencies with flawed or vulnerable technology may struggle to gain adoption or be seen as less valuable.
- **5.** Competition: The number of different cryptocurrencies available is continually increasing, and they compete with each other for adoption and investment. The

performance of one crypto currency can significantly impact another's value. For example, if a new crypto currency enters the market with features that make it more attractive to users, it may draw investment away from an existing crypto currency.

- 6. Adoption: The adoption of a crypto currency by merchants, individuals, and institutions is an important factor in its value. The more people and organizations that use a crypto currency, the more valuable it becomes. Factors that can influence adoption include ease of use, security, and the ability to use the crypto currency for a wide variety of purposes.
- 7. Network effects: Cryptocurrencies that have already achieved significant adoption and usage often benefit from network effects. In other words, as more people use the crypto currency, its value and usefulness increase, creating a positive feedback loop. This can be seen with Bitcoin, which is widely accepted and used around the world, making it easier for new users to adopt and invest in.
- **8. Mining difficulty:** Mining difficulty is a factor that affects the supply of cryptocurrencies. As the difficulty of mining a crypto currency increases, it becomes harder and more expensive to produce new coins. This can lead to a decrease in supply, which can drive up the value of the crypto currency.
- **9. Development activity:** The level of development activity for a crypto currency is another factor that can affect its value. Active development, which involves improvements to the crypto currency's technology and functionality, can increase adoption and usage.
- **10. Market capitalization:** Finally, the market capitalization of a crypto currency, which is the total value of all coins in circulation, can also affect its value. Generally, a higher market capitalization indicates that the crypto currency is more popular and valuable, although this is not always the case, and smaller cryptocurrencies can also have significant value.

- **11. Supply and demand:** As mentioned earlier, the balance of supply and demand is a fundamental factor in determining the price of cryptocurrencies. The supply of most cryptocurrencies is limited, with many having a set maximum supply cap that can never be exceeded. For example, the total supply of Bitcoin is capped at 21 million coins. This scarcity can increase the value of the crypto currency, especially if there is a high demand for it.
- **12. Market sentiment:** The sentiment or mood of the market can also affect the value of cryptocurrencies. Positive news, such as the adoption of cryptocurrencies by a large company or government, can increase demand for the crypto currency and drive up its value. Conversely, negative news, such as a major hack or regulatory crackdown, can lead to a decrease in demand and a drop in the crypto currency's value. It is worth noting that market sentiment can change quickly and often unpredictably, leading to sudden spikes or drops in crypto currency prices.
- **13. Regulatory environment:** Governments and financial institutions have varying degrees of regulation and restrictions on cryptocurrencies, and these can significantly affect their value. For example, in some countries, cryptocurrencies are fully accepted and regulated, while in others, they are banned or restricted. A favorable regulatory environment can increase adoption and usage of a crypto currency, while a negative one can stifle its growth.
- **14. Technology:** The underlying technology of a crypto currency is an important factor in its value and adoption. For example, Bitcoin's blockchain technology has proven to be secure and reliable, which has contributed to its popularity and high value. On the other hand, cryptocurrencies with flawed or vulnerable technology may struggle to gain adoption or be seen as less valuable.
- **15. Competition:** The number of different cryptocurrencies available is continually increasing, and they compete with each other for adoption and investment. The performance of one crypto currency can significantly impact another's value. For

example, if a new crypto currency enters the market with features that make it more attractive to users, it may draw investment away from an existing crypto currency.

- **16. Adoption:** The adoption of a crypto currency by merchants, individuals, and institutions is an important factor in its value. The more people and organizations that use a crypto currency, the more valuable it becomes. Factors that can influence adoption include ease of use, security, and the ability to use the crypto currency for a wide variety of purposes.
- 17. Network effects: Cryptocurrencies that have already achieved significant adoption and usage often benefit from network effects. In other words, as more people use the crypto currency, its value and usefulness increase, creating a positive feedback loop. This can be seen with Bitcoin, which is widely accepted and used around the world, making it easier for new users to adopt and invest in.
- **18. Mining difficulty:** Mining difficulty is a factor that affects the supply of cryptocurrencies. As the difficulty of mining a crypto currency increases, it becomes harder and more expensive to produce new coins. This can lead to a decrease in supply, which can drive up the value of the crypto currency.

1.13 ADVANTAGES OF CRYPTO CURRENCY



- 1. Decentralization: Crypto currency operates on a decentralized network, meaning it is not controlled by any government or financial institution. This makes it less susceptible to political or economic influence and provides greater financial freedom.
- **2. Security:** Crypto currency transactions are secured through cryptography, making them extremely difficult to hack or manipulate. This provides a higher level of security than traditional banking systems.
- **3. Privacy:** Transactions on the crypto currency network are pseudonymous, meaning users can send and receive funds without revealing their identity. This provides greater financial privacy and anonymity than traditional banking systems.
- **4.** Lower transaction fees: Crypto currency transactions typically have lower fees than traditional banking systems, particularly for international transactions. This can make it a more cost-effective option for businesses and individuals.

- **5.** Faster transactions: Crypto currency transactions can be processed almost instantly, providing greater convenience and efficiency compared to traditional banking systems, which can take days to process transactions.
- **6. Financial inclusion:** Crypto currency can provide financial services to people who may not have access to traditional banking systems, particularly in developing countries where banking infrastructure may be limited.
- **7. Innovation:** Crypto currency is a rapidly evolving technology that is driving innovation in the financial industry, leading to new opportunities for investment and entrepreneurship.
- 8. Accessibility: Anyone with an internet connection can access and use crypto currency, making it a more inclusive and accessible financial system compared to traditional banking systems, which may require physical presence or documentation to open an account.
- **9. Transparency:** Transactions on the crypto currency network are recorded on a public ledger, providing greater transparency and accountability compared to traditional banking systems, which may operate in opaque or closed environments.
- **10. Immutable records:** Once a transaction is recorded on the blockchain, it cannot be altered or deleted, providing a permanent and tamper-proof record of all transactions.
- **11. Micropayments:** Crypto currency allows for micropayments, which are transactions involving very small amounts of money. This can enable new business models and revenue streams that would not be possible with traditional banking systems.
- **12. Global reach:** Crypto currency can be used for transactions anywhere in the world, without the need for currency exchange or other intermediaries. This can facilitate international trade and commerce, particularly for small and medium-sized businesses.

- **13. Community-driven:** Crypto currency is often developed and maintained by a community of users and developers, rather than a centralized authority. This can lead to a more democratic and participatory financial system, where users have a greater say in the development and governance of the network.
- **14. No chargebacks:** Crypto currency transactions are irreversible, meaning once a transaction is processed, it cannot be reversed or charged back. This eliminates the risk of chargebacks, which can be a significant cost for merchants in traditional payment systems.
- **15. Programmable money:** Some cryptocurrencies, such as Ethereum, allow for the creation of smart contracts, which are self-executing contracts with the terms of the agreement between buyer and seller being directly written into lines of code. This enables the creation of programmable money, which can automate financial transactions and enable new business models.
- **16. Lower fraud:** Crypto currency transactions are highly secure and transparent, making them less susceptible to fraud and scams compared to traditional banking systems.
- **17. Investment opportunities:** Crypto currency can provide new investment opportunities, enabling individuals to invest in digital assets and participate in the growth of the crypto currency market.
- **18. Decentralized finance:** The rise of decentralized finance (DeFi) applications, which are built on top of blockchain technology, enables a range of financial services to be provided in a decentralized and automated manner. This can provide greater financial inclusion and democratize access to financial services.

1.14 DISADVANTAGES OF CRYPTO CURRENCY



- 1. Volatility: Cryptocurrencies can be highly volatile, with significant price fluctuations over short periods of time. This can make them risky for investment and can lead to significant losses for investors.
- 2. Lack of regulation: Cryptocurrencies are largely unregulated, which can make them vulnerable to fraud, scams, and market manipulation. This can also create uncertainty and instability in the market.
- **3. Security risks:** While crypto currency transactions are generally considered to be secure, there have been incidents of theft and hacking of crypto currency exchanges and wallets. This can lead to significant losses for users and can erode trust in the security of the system.
- **4. Limited acceptance:** While the number of merchants and businesses accepting cryptocurrencies is growing, they are still not widely accepted as a form of payment, which can limit their usefulness and adoption.

- 5. Complexity: Crypto currency can be complex and difficult to understand for the average user, requiring technical knowledge and expertise to use and secure properly. This can limit the accessibility and adoption of crypto currency.
- **6.** Environmental impact: Some cryptocurrencies, particularly those that use the proofof-work (PoW) consensus algorithm, require significant amounts of energy to mine and process transactions, which can have a significant environmental impact.
- **7. Irreversibility:** While the irreversibility of crypto currency transactions can be an advantage in some cases, it can also be a disadvantage. If a user sends crypto currency to the wrong address or falls victim to a scam or fraud, there is no recourse to recover the funds.
- **8.** Lack of consumer protection: Because cryptocurrencies are largely unregulated, there is limited consumer protection for users in the event of fraud or theft. This can make it difficult for users to recover lost funds or seek restitution.
- **9. Limited scalability:** Some cryptocurrencies, such as Bitcoin, have limited scalability due to the design of the network, which can result in slow transaction processing times and high fees during periods of high network usage.
- 10. Potential for illegal activities: Cryptocurrencies can be used for illegal activities, such as money laundering, tax evasion, and the purchase of illegal goods and services. This can lead to increased regulatory scrutiny and negative perception of the technology.
- **11. Dependence on technology:** Crypto currency is dependent on technology, and a failure or breach in the underlying technology can lead to significant losses for users and erode trust in the system.

- **12. Lack of intrinsic value:** Unlike traditional currencies, cryptocurrencies do not have an intrinsic value backed by a government or central authority. This can make them vulnerable to speculative bubbles and market volatility.
- **13. Irreversibility:** While the irreversibility of crypto currency transactions can be an advantage in some cases, it can also be a disadvantage. If a user sends crypto currency to the wrong address or falls victim to a scam or fraud, there is no recourse to recover the funds.
- **14. Lack of consumer protection:** Because cryptocurrencies are largely unregulated, there is limited consumer protection for users in the event of fraud or theft. This can make it difficult for users to recover lost funds or seek restitution.
- **15. Limited scalability:** Some cryptocurrencies, such as Bitcoin, have limited scalability due to the design of the network, which can result in slow transaction processing times and high fees during periods of high network usage.
- 16. Potential for illegal activities: Cryptocurrencies can be used for illegal activities, such as money laundering, tax evasion, and the purchase of illegal goods and services. This can lead to increased regulatory scrutiny and negative perception of the technology.
- **17. Limited use cases:** While the potential use cases for crypto currency are significant, they are currently limited in practice. This can limit adoption and utility, particularly in areas where traditional banking systems are well-established.
- **18. Perception as a speculative asset:** Cryptocurrencies are often perceived as a speculative asset, rather than a means of payment or store of value. This can lead to market volatility and can create a perception of risk and instability among potential users.

1.15 REMUNERATION

Cryptocurrencies are often volatile, and their value can fluctuate rapidly. As a result, determining appropriate compensation for work done in crypto currency can be challenging.

One approach is to determine the value of the crypto currency at the time the work is completed and use that value as the basis for compensation. For example, if an employee completes a project and is paid in Bitcoin, the employer can determine the value of Bitcoin at the time of payment and use that value to determine the employee's compensation.

Another approach is to use a stablecoin, which is a crypto currency that is designed to maintain a stable value. These stablecoins are often pegged to a traditional currency, such as the US dollar, and their value is designed to remain relatively stable. Using a stablecoin can help to minimize the risk associated with crypto currency volatility, making it easier to determine appropriate compensation.

It's important to note that tax laws may vary depending on the jurisdiction, and individuals or businesses that pay or receive crypto currency as remuneration should consult with a tax professional to ensure they are complying with applicable regulations.

Crypto currency is a digital or virtual currency that uses cryptography to secure transactions and control the creation of new units. It operates independently of a central bank and has become increasingly popular in recent years. As a result, more businesses are considering using crypto currency as a form of remuneration. However, there are a few things to consider before accepting crypto currency as payment.

One of the primary concerns with crypto currency is its volatility. Cryptocurrencies, such as Bitcoin and Ethereum, have experienced significant fluctuations in value, often in a matter of hours or even minutes. This volatility can make it difficult to determine the appropriate compensation for work done in crypto currency. It's important to consider the current value of the crypto currency at the time of payment and use that value as the basis for compensation. Employers and employees should also consider the risks associated with accepting crypto currency as payment. The value of the crypto currency could drop

significantly before it can be converted to fiat currency, leaving the employee with less compensation than anticipated.

Another consideration when it comes to remuneration in crypto currency is tax implications. The tax treatment of cryptocurrencies varies depending on the jurisdiction. Some countries treat crypto currency as a form of property, while others treat it as a currency. It's important to consult with a tax professional to understand the tax implications of receiving crypto currency as payment.

When it comes to payment platforms, there are several options available for businesses and individuals looking to transfer crypto currency. Coinbase, BitPay, and Gemini are popular payment platforms that allow for easy transfer of crypto currency between parties. However, it's important to consider factors such as fees, security, and ease of use when selecting a payment platform.

Contractual agreements are also important when accepting crypto currency as payment. A contractual agreement should outline the terms of the payment, including the value of the crypto currency, the timing of the payment, and any other relevant details. This can help to protect both parties in the event of a dispute.

Finally, when considering remuneration in crypto currency, it's important to consider the future value of the currency. Cryptocurrencies are known for their volatility, which means that the value of the crypto currency could change significantly in a short period. This volatility can be a double-edged sword. On the one hand, if the value of the crypto currency increases significantly, the employee could end up with a windfall. On the other hand, if the value of the crypto currency drops significantly, the employee could end up with a windfall.

Overall, accepting crypto currency as payment can be an attractive option for businesses and individuals looking for a fast and secure way to transfer funds. However, it's important to consider the risks associated with crypto currency, including its volatility and tax implications. Employers and employees should also consider the use of stablecoins, which are cryptocurrencies that are designed to maintain a stable value. Using stablecoins can help to minimize the risk associated with crypto currency volatility, making it easier to determine appropriate compensation.

In conclusion, remuneration in crypto currency can be an attractive option for businesses and individuals, but it's important to approach it with caution. Cryptocurrencies are still a relatively new form of payment and are subject to volatility, which can make it challenging to determine the appropriate compensation. Employers and employees should carefully consider the risks associated with crypto currency and consult with a tax professional to understand the tax implications of receiving crypto currency as payment. By taking these steps, businesses and individuals can enjoy the benefits of crypto currency while minimizing the associated risks.



CHAPTER 2

RESEARCH METHODOLOGY

- 2.1 Research Methodology
- 2.2 Source of Data
- 2.3 Objectives.
- 2.4 Scope of the Study.
- 2.5 Hypothesi
- 2.6 Limitations.

2.1 RESEARCH METHODOLOGY OF CRYPTO CURRENCY

Research methodology for crypto currencies involves a systematic and scientific approach to studying the different aspects of cryptocurrencies. This involves a combination of quantitative and qualitative research methods to gather and analyze data.

Some of the common research methods used in studying cryptocurrencies include:

Research methodology for cryptocurrencies typically involves a combination of quantitative and qualitative research methods to gather and analyze data. The specific methods used will depend on the research question, the available data sources, and the resources available for the study.

One common research method is survey research, which involves collecting data through questionnaires or interviews from a sample of crypto currency users, investors, or experts. Surveys can provide insights into the attitudes, beliefs, and behaviours of crypto currency users, and can help to identify factors that influence their decision-making.

Another method is case studies, which involve analyzing specific instances of crypto currency use or development. Case studies can provide a detailed understanding of the factors that influence the success or failure of specific crypto currency projects, and can be used to develop theories and hypotheses about the broader crypto currency ecosystem.

Data analysis is also an important method in crypto currency research. This involves analyzing large datasets of crypto currency transactions, market trends, or user behaviour. Data analysis can help to identify patterns and trends that provide insights into the behaviour of crypto currency users and the market as a whole. This can be useful in understanding the impact of specific events or policy interventions on the crypto currency ecosystem.

Experimental research is another method used in crypto currency research. This involves conducting experiments to test the effects of specific interventions or changes to the crypto currency ecosystem. For example, an experiment might test the impact of a particular regulation on the behaviour of crypto currency users. Experimental research can

help to understand the causal relationships between different factors and the behaviour of crypto currency users.

Ethnography is another method that can be used in crypto currency research. Ethnography involves studying the culture and social practices of crypto currency users and communities. Ethnographic research can provide insights into the social and cultural factors that influence the adoption and use of cryptocurrencies, and can help to identify barriers to adoption and strategies for promoting wider use.

In addition to these methods, there are other research methodologies that can be used in crypto currency research. For example, literature review involves conducting a systematic review of the existing literature on cryptocurrencies, to identify gaps in the current knowledge and areas for further research. Network analysis involves analyzing the structure of the crypto currency network and the relationships between different entities within the network. Discourse analysis involves analyzing the language used in discussions about cryptocurrencies, to understand the cultural and ideological factors that shape public perceptions of cryptocurrencies. Simulation modeling involves creating computer models that simulate the behaviour of crypto currency users and the market, to test the effects of different policy interventions or market conditions on the crypto currency ecosystem.

Overall, a comprehensive research methodology for cryptocurrencies should involve a combination of these methods to provide a more complete picture of the crypto currency ecosystem and its impact on society. By combining quantitative and qualitative research methods, researchers can develop a more nuanced understanding of the complex and rapidly evolving crypto currency ecosystem. This can help to inform policy decisions, guide investment strategies, and promote wider adoption of cryptocurrencies.

2.2 SOURCES OF DATA

Primary and secondary sources are used for collecting the Data for the study.

PRIMARY SOURCES

Primary Data was collected through questionnaire by surveying investors and general public to understand the level of awareness and perception towards cryptocurrencies.

SECONDARY SOURCES

Secondary data includes the publications on various websites including investors.gov, grow scrip box, topper, FINANCIAL EXPRESS, AMFI official website.

2.3 OBJECTIVE STUDY

- To create awareness about crypto currency
- To study perception towards crypto currency
- To study what are the reason for not invest in crypto currency
- To study Perception towards safety and security of investment in crypto currency
- To compare perception towards crypto currency and traditional investment avenues

2.4 SCOPE OF STUDY

Crypto currency is a digital or virtual currency that uses cryptography for security and operates independently of a central bank. Bitcoin was the first decentralized crypto currency to gain widespread popularity and since then, there has been a surge in the creation of new cryptocurrencies.

The scope of study on crypto currency is vast and can include various aspects such as the technology behind it, its market behaviour, adoption, and impact on the global economy. One of the most important aspects of crypto currency is blockchain technology, which is a decentralized ledger that records all transactions. A study on blockchain technology can explore its technical aspects, working, and potential applications in different industries.

The crypto currency market is highly volatile and is influenced by various factors such as supply and demand, regulations, and news. A study on the crypto currency market can focus on understanding its trends, behaviour, and impact on the global economy. Cryptocurrencies have been used for various purposes such as investment, payment, and even as a store of value. A study on the different use cases of crypto currency can provide insight into its potential and limitations.

The adoption of cryptocurrencies is gradually increasing, and some countries have even legalized it as a form of payment. A study on the adoption of cryptocurrencies can focus on understanding the factors that influence its acceptance and the potential impact on the financial system. Moreover, regulatory frameworks surrounding cryptocurrencies are evolving, and a study on the regulatory landscape can provide insight into the legal and compliance requirements for businesses operating in the crypto currency space.

<u>2.5 HYPOTHESIS</u>

H0: Investor perception towards investment in crypto currency is not largely influenced by their level of knowledge and understanding of the technology and market trends

H1: Investor perception towards investment in crypto currency is largely influenced by their level of knowledge and understanding of the technology and market trend

2.6 LIMITATIONS

The study has some limitations. The present study has been limited to the awareness of Cryptocurrencies among salaried investors, businessman, self employed, homemaker, about investing in Crypto currency in Indian only. The study is only representative and not exhaustive one. This study is only limited for Thane area. Yes, there are few exception and the study and survey is based on 3 months respectively.

CHAPTER 3

REVIEW OF LITERATURE

Review of literature on Crypto currency



- Tschorsch, F., & Scheuermann, B. in their research paper "Bitcoin and beyond: A technical survey on decentralized digital currencies" (2016) have studied that, this paper by Florian Tschorsch and Björn Scheuermann provides a technical survey of decentralized digital currencies, including Bitcoin and its various derivatives.
- 2. Gandal, N., Hamrick, J. T., Moore, T., & Oberman, T. in their research paper Price manipulation in the Bitcoin ecosystem (2018) have studied that, this paper by Neil Gandal and his colleagues investigates the prevalence and impact of price manipulation in the Bitcoin ecosystem, analyzing data from the Mt. Gox exchange and other sources. The authors find evidence of market manipulation through trading bots and other strategies, and highlight the need for improved regulatory oversight of crypto currency markets.

- 3. Nakamoto, S. in their research paper "Bitcoin: A Peer-to-Peer Electronic Cash System" (2008) have studied that, this paper by Satoshi Nakamoto introduces the concept of Bitcoin and its underlying blockchain technology, laying the groundwork for the development of the crypto currency ecosystem.
- 4. Vigna, P., & Casey, M. J. "The age of crypto currency: How Bitcoin and digital money are challenging the global economic order" (2015) have studied that, this book by Paul Vigna and Michael J. Casey provides a detailed account of the history and evolution of Bitcoin and other cryptocurrencies, as well as their potential impact on the global economy and financial system.
- 5. Swan, M. in their research paper "Blockchain: Blueprint for a New Economy" (2018) have studied that, this book by Melanie Swan provides an introduction to blockchain technology and its potential impact on various industries, including finance, healthcare, and supply chain management.
- 6. M. Miah in their research paper "A Systematic Review on Crypto currency" (2021) have studied that, this systematic review paper investigates the recent developments of crypto currency by analyzing academic and practitioner literature. It aims to identify the key themes and findings in the literature to provide a comprehensive understanding of the crypto currency phenomenon. The review identifies the technological, economic, and social implications of crypto currency, as well as the regulatory challenges and future research directions.
- 7. N. Ali and N. Clarke in their research paper "A Literature Review on the Blockchain and its Implications for Supply Chain Management" (2019) have studied that, This literature review examines the use of blockchain technology in supply chain management. It explores the potential benefits of blockchain in enhancing supply chain efficiency, transparency, and security. The review also identifies the challenges and limitations of blockchain, including its scalability, interoperability, and regulatory issues.

- 8. T. Fomin and V. Loshkov in their research paper "Crypto currency and Blockchain Technology" (2020) have studied that, this literature review provides an overview of crypto currency and blockchain technology, focusing on the technical aspects and potential applications in different industries. The review explores the underlying principles of blockchain, including its decentralized and immutable nature. It also discusses the challenges and limitations of crypto currency and blockchain, such as scalability, security, and regulatory issues.
- **9. K. Kim Research paper** in their research paper "Cryptocurrencies and Blockchain Technology A Comprehensive Literature Review" (2018) have studied that, this comprehensive literature review examines the emergence and evolution of cryptocurrencies and blockchain technology. It provides an overview of the technical and economic aspects of crypto currency and blockchain, as well as their potential applications in various industries. The review also discusses the challenges and limitations of crypto currency and blockchain, including their security risks, regulatory challenges, and scalability issues.
- 10. A. Makridakis and M. Goulas in their research paper "Crypto currency Market Anomalies: The Day-of-the week Effect" (2020) have studied that, this literature review examines the various anomalies that exist in the crypto currency market. It identifies and analyzes the different types of anomalies, such as the price-volume relationship, the momentum effect, and the volatility persistence. The review also discusses the implications of these anomalies for investors and traders in the crypto currency market.

- 11. S. Almalki and S. Sivapalan in their research paper "Cryptocurrencies and Blockchain Technology" (2019) have studied that, this literature review provides an overview of cryptocurrencies and blockchain technology. It explores the history and evolution of crypto currency and blockchain, as well as their potential applications in various industries. The review also discusses the challenges and limitations of crypto currency and blockchain, including their security risks, scalability issues, and regulatory challenges.
- 12. Author: J. Kshetri in their research paper "Blockchain's Roles in Meeting Key Supply Chain Management Objectives" (2018) have studied that, this literature review examines the potential role of blockchain technology in addressing key supply chain management objectives. It explores the benefits of blockchain in enhancing supply chain visibility, efficiency, and security. The review also discusses the challenges and limitations of blockchain, including its scalability, interoperability, and regulatory issues.
- 13. Author: R. Ali, M. Salahuddin, and B. Alarifiin in their research paper "Crypto currency Research Trends" (2021) have studied that, this systematic literature review analyzes the trends and developments in crypto currency research. It identifies the research themes and methodologies used in crypto currency research, as well as the challenges and opportunities in the field. The review also discusses the future research directions and potential implications of crypto currency for various industries.
- 14. Narayanan, A., Bonneau, J., Felten, E., Miller, A., & Goldfeder, S. in their research paper Bitcoin and Crypto currency Technologies (2016) have studied that A Comprehensive Introduction. This book by Arvind Narayanan and his colleagues provides a comprehensive overview of crypto currency and blockchain technology, including their history, technical aspects, and potential applications. The authors also explore the legal and regulatory challenges of crypto currency and examine the social and economic implications of decentralized systems.

15. Rouhani, S., & Zadeh, H. F in their research Blockchain technology for improving supply chain performance (2019) have studied that, A systematic literature review. International Journal of Production Research, 57(7), 2119-2141. This paper by Seyed Rouhani and Hamidreza Farid Zadeh reviews the existing literature on the potential applications of blockchain technology in supply chain management. The authors identify key benefits of using blockchain, including improved traceability, transparency, and security, and discuss the challenges of implementing blockchain-based systems in complex supply chain networks.

CHAPTER 4

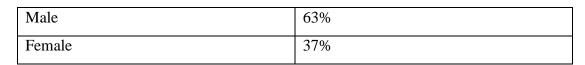
DATA ANALYSIS AND INTERPRETATION

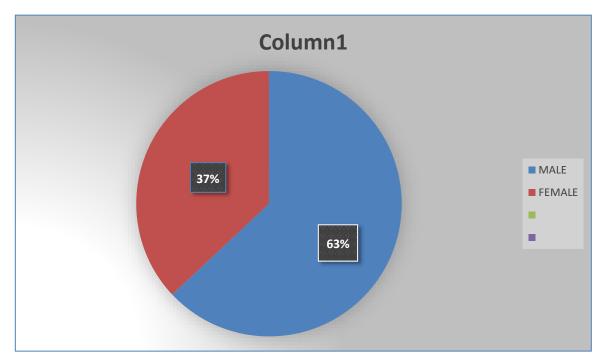
Data analysis and interpretation of crypto currency involves examining various types of data associated with different cryptocurrencies. Some key types of data that are often considered include price fluctuations, trading volumes, market capitalization, and other market trends.

The process typically begins with the collection of relevant data from various sources, such as financial news outlets, market research reports, and crypto currency exchanges. The data can then be analysed using statistical and other techniques to identify patterns, trends, and other insights that may be relevant to investors or other stakeholders.

One common approach to data analysis in the crypto currency market is to use charting and technical analysis tools to visualize the price movements of various cryptocurrencies over time. This can help investors identify trends and patterns that may be useful in making investment decisions.

1) What is your Gender?



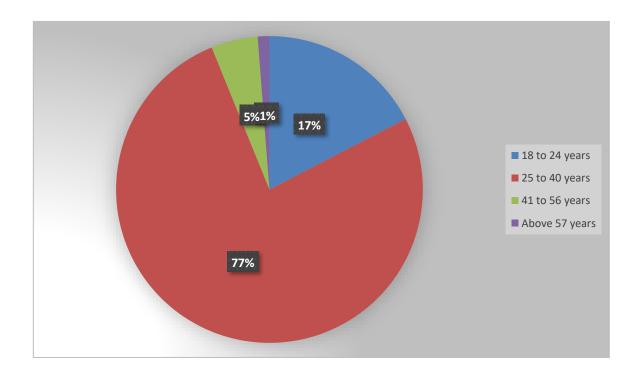


INTERPRETATION :-

In the above pie chart, we can see that there are 63% people are male and 37% people are female and there are not people to for Prefer not to say.

2) What is your age?

| 18 to 24 years | 17.40% |
|----------------|--------|
| 25 to 40 years | 76.46% |
| 41 to 56 years | 4.93% |
| Above 57 years | 1.22% |

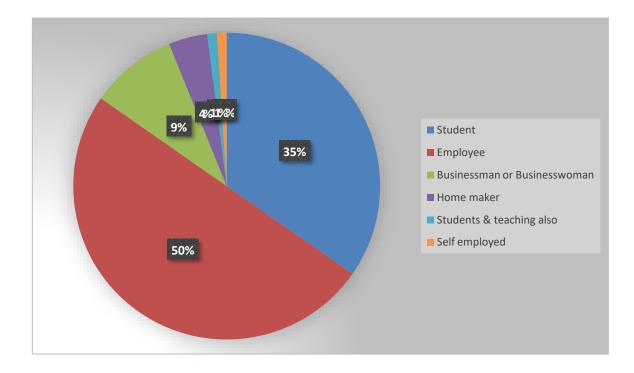


INTERPRETATION :-

In the above pie chart, we can see that there are 17% people are 18 to 24 years old, 77% people are 25 to 40 years old, 5% people are 41to 56 years old and 1% people are above 57 years old.

3) What is your profession?

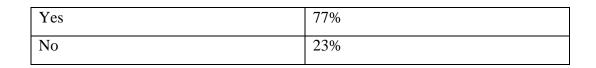
| Student | 34% |
|------------------------------|-----|
| Employee | 49% |
| Businessman or Businesswoman | 9% |
| Home maker | 4% |
| Students & teaching also | 1% |
| Self employed | 1% |

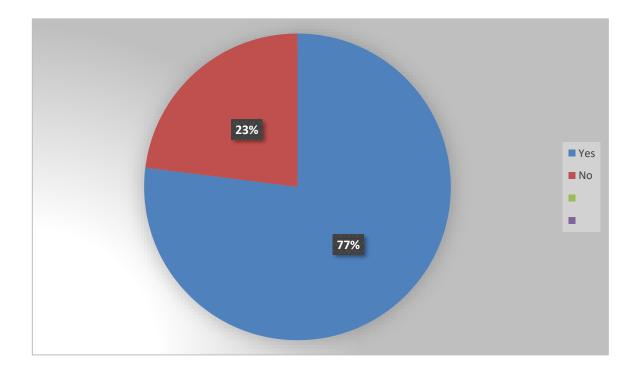


INTERPRETATION :-

In the above pie chart, we can see that there are 34% people are student and 49% people are employee, 9% people are businessman or businesswoman, 4% people are home maker, 1% people are student and teaching and 1% people are self employed.

4) Are you familiar with the concept of crypto currency before?

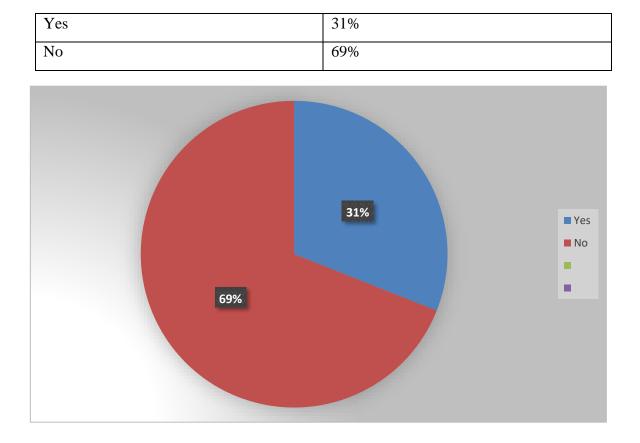




INTERPRETATION :-

In the above pie chart, we can see that there are 77% people are familiar to the crypto currency and 23% people are not familiar to the crypto currency.

5) Have you ever invested in crypto currency?

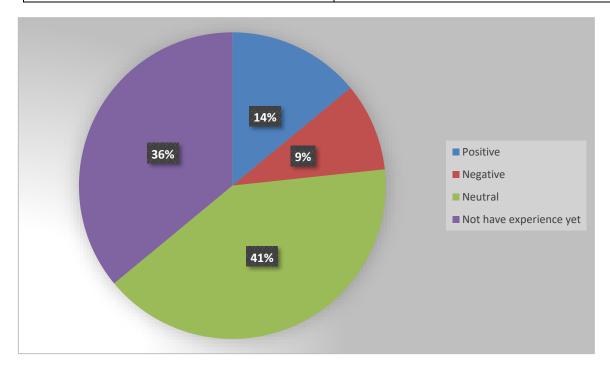


INTERPRETATION :-

In the above pie chart, we can see that there are 69% people invested in crypto currency and 31% people are not investing in crypto currency.

6) If yes, what was your experience with crypto currency investment?

| Positive | 14% |
|-------------------------|-------|
| Negative | 9.3% |
| Neutral | 40.7% |
| Not have experience yet | 36% |

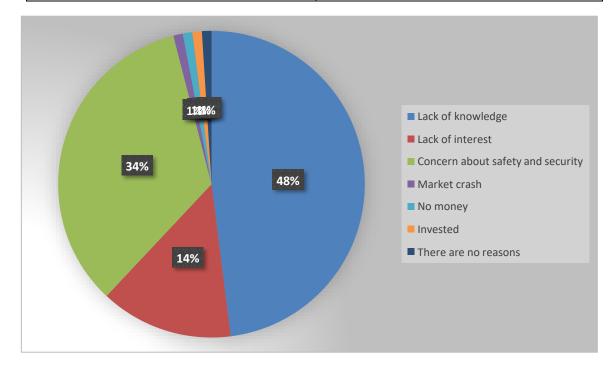


INTERPRETATION :-

In the above pie chart, we can see that there are 14% people are feels positive experience, 9.3% people are feel negative experience, 40.7% people are feel neutral about crypto currency and 3.6 people was not have experience yet.

7) If no, what is the reason for not investing in crypto currency?

| Lack of knowledge | 48% |
|-----------------------------------|-----|
| Lack of interest | 14% |
| Concern about safety and security | 34% |
| Market crash | 1% |
| No money | 1% |
| Invested | 1% |
| There are no reasons | 1% |

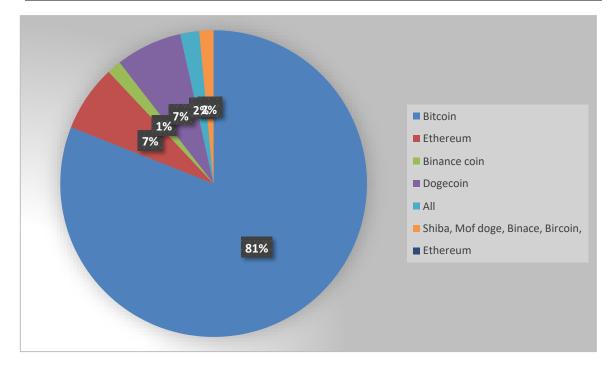


INTERPRETATION :-

In the above pie chart, we can see that there are 48% people not investing because of lake of knowledge, 14% people are not investing because of lack of interest, 34% people are not investing because of they concern about safety and security, 1% people are investing because of market crash 1% people are not investing because of they do not have money to invest, 1% people invested in crypto currency and 1% people have no reason to invest.

8) Which crypto currency have you heard of the most?

| Bitcoin | 81% |
|-----------------------------------|------|
| Ethereum | 7% |
| Binance coin | 1.5% |
| Dogecoin | 7% |
| All | 2% |
| Shiba, Mof doge, Binace, Bircoin, | 1.5% |
| Ethereum | |

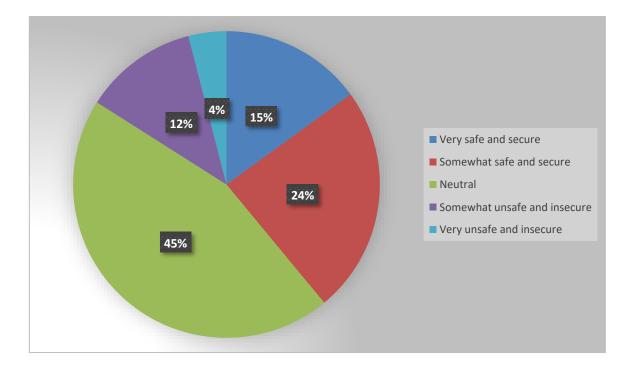


INTERPRETATON

In the above pie chart, we can see that there are 81% people heard the bitcoin most, 7% people heard ethereum most, 1.5% people are heard the Binance coin most, 7% people heard dogecoin most, 2% people heard all type of crypto currency and 1.5% people heard Shiba, Mof doge, Binace, Bircoin, Ethereum

9) How do you perceive crypto currency in terms of its safety and security?

| Very safe and secure | 15% |
|------------------------------|-----|
| Somewhat safe and secure | 24% |
| Neutral | 45% |
| Somewhat unsafe and insecure | 12% |
| Very unsafe and insecure | 4% |

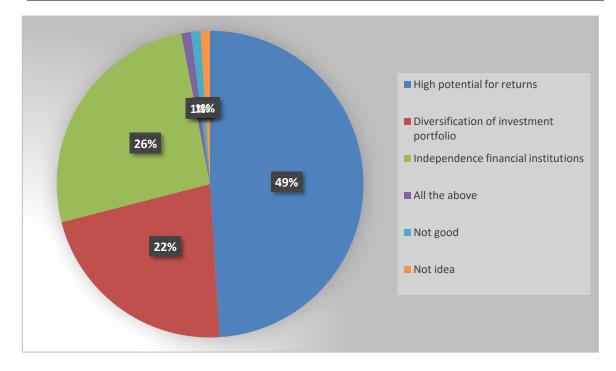


INTERPRETATION

In the above pie chart, we can see that there are 15% people feels very safe and secure, 24% people feel somewhat safe and secure, 45% people feel neutral, 12% people feels somewhat unsafe and insecure, 4% very unsafe and insecure

10) What do you think are the advantage of investing in crypto currency?

| High potential for returns | 49% |
|---|-----|
| Diversification of investment portfolio | 22% |
| Independence financial institutions | 26% |
| All the above | 1% |
| Not good | 1% |
| Not idea | 1% |

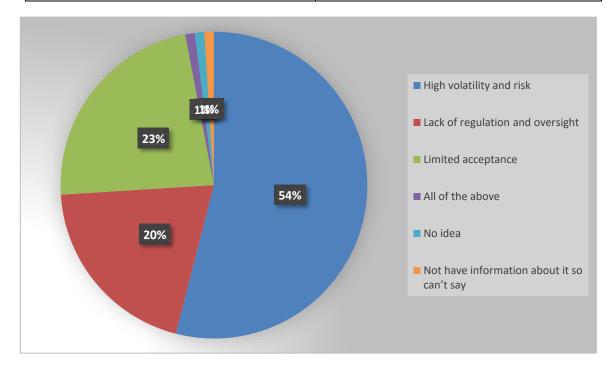


INTERPRETATION

In the above pie chart, we can see that there are 49% people think advantage is high potential for returns, 22% people are think advantage is diversification of investment portfolio, 26% people are think advantage is independence financial institutions, 1% people think all of the above, 1% people think it's not good and 1% people has no idea.

11) What do you think are the disadvantages of investing in crypto currency?

| High volatility and risk | 54% |
|--|-----|
| Lack of regulation and oversight | 20% |
| Limited acceptance | 23% |
| All of the above | 1% |
| No idea | 1% |
| Not have information about it so can't say | 1% |

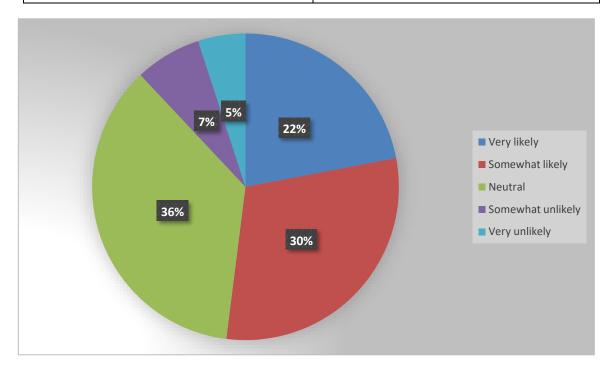


INTERPRETATION

In the above pie chart, we can see that there are 54% people think high volatility and risk, 20% people are think lack of regulation and oversight, 23% people think limited acceptance, 1% people think all of above, 1% people think no idea and 1% people think not have information about it so can't say.

12) How likely are you to invest in crypto currency in the feature?

| Very likely | 22% |
|-------------------|-----|
| Somewhat likely | 30% |
| Neutral | 36% |
| Somewhat unlikely | 7% |
| Very unlikely | 5% |



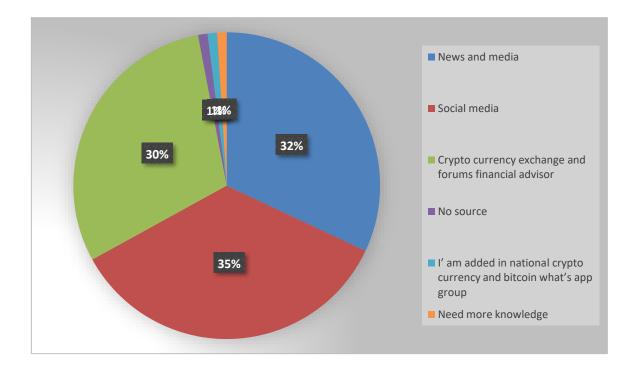
INTERPRETATION

In the above pie chart, we can see that there are 22% people are very likely to invest in feature, 30% people are somewhat likely to invest in feature, 36% are neutral to invest in feature, 7% are somewhat unlikely to invest in feature and 5% are very unlikely to invest in feature.

13) What sources of information do you rely on make investment decisions in crypto

currency?

| News and media | 32% |
|--|-----|
| Social media | 35% |
| Crypto currency exchange and forums financial advisor | 30% |
| No source | 1% |
| I' am added in national crypto currency and bitcoin what's app group | 1% |
| Need more knowledge | 1% |

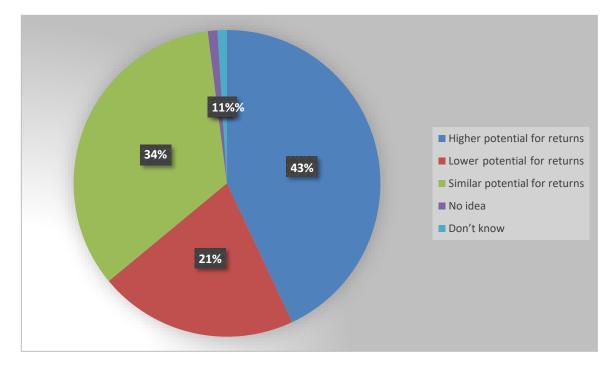


INTERPRETATION

In the above pie chart, we can see that there are 32% people are make's investment decisions crypto Currency by news media, 35% people make investment decisions in crypto currency by social media, 30% make investment decisions in crypto currency by Crypto currency exchange and forums financial advisors, 1% make investment decisions in crypto currency by no source, 1% people by I' am added in national crypto currency and bitcoin what's app group and 1% people need more knowledge.

14) How do you think crypto currency investment compares to traditional investment like stocks or real estate?

| Higher potential for returns | 43% |
|-------------------------------|-----|
| Lower potential for returns | 21% |
| Similar potential for returns | 34% |
| No idea | 1% |
| Don't know | 1% |

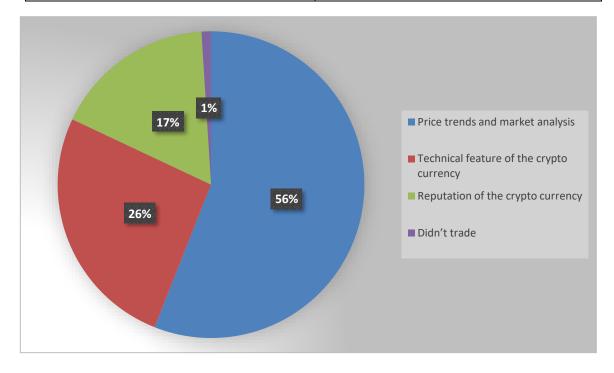


INTERPRETATION

In the above pie chart, we can see that there are 43% people are thinks higher potential for returns, 21% people think that lower potential for returns, 34% people are think that similar potential for returns, 1% people think they have no idea and 1% people don't know aboutit.

15) What factors do you consider when deciding whether to invest in crypto currency?

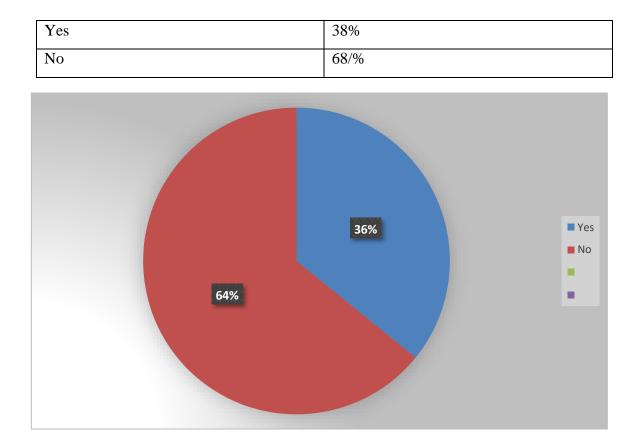
| Price trends and market analysis | 56% |
|--|-----|
| Technical feature of the crypto currency | 26% |
| Reputation of the crypto currency | 17% |
| Didn't trade | 1% |



INTERPRETATION

In the above pie chart, we can see that there are 56% people consider to invest Price trends and market analysis, 26% people are consider to invest Technical feature of the crypto currency, 17% people consider to invest Reputation of the crypto currency and 1% people didn't trade.

16) Have you ever suffered a loss while investing in crypto currency?

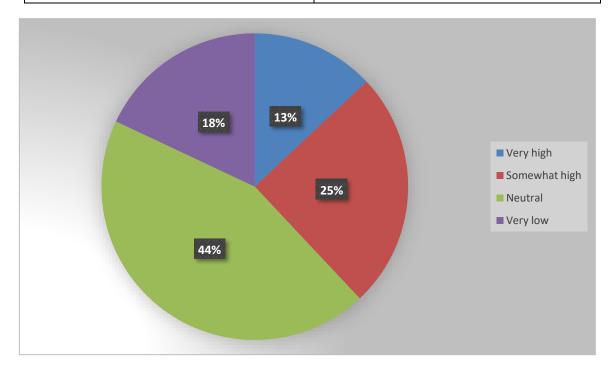


INTERPRETATION

In the above pie chart, we can see that there are 38% of people has suffered loss while investing and 68% people are not suffer any loss while investing in crypto currency.

17) How would you rate overall knowledge and understanding of crypto currency?

| Very high | 13% |
|---------------|-----|
| Somewhat high | 25% |
| Neutral | 44% |
| Very low | 18% |



INTERPRETATION

In the above pie chart, we can see that there are 13% people has very high knowledge and understanding of crypto currency, 25% people has somewhat knowledge and understanding of crypto currency, 44% people has neutral knowledge and understanding of crypto currency, 18% people has very low knowledge and understanding of crypto currency.

CHAPTER 5

FINDINGS, CONCLUSION, SUGGESTION

FINDINGS:



- There are 63% people are male and 33% people are female and there are not people to for Prefer not to say.
 - There are 17% people are 18 to 24 years old, 77% people are 25 to 40 years old, 5% people are 41to 56 years old and 1% people are above 57 years old.
- There are 34% people are student and 49% people are employee, 9% people are businessman or businesswoman, 4% people are home maker, 1% people are student and teaching and 1% people are self employed.
- There are 77% people are familiar to the crypto currency and 23% people are not familiar to the crypto currency.

- There are 69% people invested in crypto currency and 31% people are not investing in crypto currency.
- There are 14% people are feel positive experience, 9.3% people are feel negative experience, 40.7% people are feel neutral about crypto currency and 3.6 people was not have experience yet.
- There are 48% people not investing because of lake of knowledge, 14% people are not investing because of lack of interest, 34% people are not investing because of they concern about safety and security, 1% people are investing because of market crash 1% people are not investing because of they do not have money to invest, 1% people invested in crypto currency and 1% people have no reason to invest.
- There are 81% people heard the bitcoin most, 7% people heard ethereum most, 1.5% people are heard the binance coin most, 7% people heard dogecoin most, 2% people heard all type od crypto currency and 1.5% people heard Shiba, Mof doge, Binace, Bitcoin, Ethereum.
- There are 15% people feels very safe and secure, 24% people feel somewhat safe and secure, 45% people feels neutral, 12% people feels somewhat unsafe and insecure, 4% very unsafe and insecure
- There are 49% people think advantage is high potential for returns, 22% people are think advantage is diversification of investment portfolio, 26% people are think advantage is independence financial institutions, 1% people think all of the above, 1% people think it's not good and 1% people has no idea.
- There are 54% people think high volatility and risk, 20% people are think lack of regulation and oversight, 23% people think limited acceptance, 1% people think all of above,1% people think no idea and 1% people think not have information about it so can't say.

- There are 22% people are very likely to invest in feature, 30% people are somewhat likely to invest in feature, 36% are neutral to invest in feature, 7% are somewhat unlikely to invest in feature and 5% are very unlikely to invest in feature.
- There are 32% people are make investment decisions in crypto Currency by news media, 35% people make investment decisions in crypto currency by social media, 30% make investment decisions in crypto currency by Crypto currency exchange and forums financial advisors, 1% make investment decisions in crypto currency by no source, 1% people by I' am added in national crypto currency and bitcoin what'app group and 1% people need more knowledge.
- There are 43% people are think higher potential for returns, 21% people think that lower potential for returns, 34% people are think that similar potential for returns, 1% people think they have no idea and 1% people don't know about it.
- There are 56% people consider to invest Price trends and market analysis, 26% people are consider to invest Technical feature of the crypto currency, 17% people consider to invest Reputation of the crypto currency and 1% people didn't trade.
- There are 38% people are suffer loss while investing and 68% people are not suffer any loss while investing in crypto currency.
- There are 13% people has very high knowledge and understanding of crypto currency, 25% people has somewhat knowledge and understanding of crypto currency, 44% people has neutral knowledge and understanding of crypto currency, 18% people has very low knowledge and understanding of crypto currency.

CONCLUSION :

Crypto currency is a relatively new and innovative technology that has the potential to revolutionize the financial world. While it has gained widespread popularity and has been adopted by many individuals and organizations, it is still facing significant challenges and uncertainties.

One of the most significant benefits of crypto currency is its decentralized nature, which allows users to conduct transactions without the need for intermediaries such as banks or government agencies. This feature also provides users with greater privacy and security when compared to traditional financial systems.

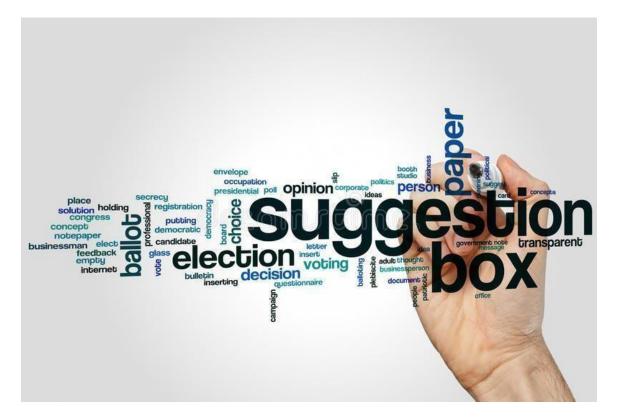
However, crypto currency also faces several challenges. One major concern is its lack of regulation, which can lead to fraudulent activities, scams, and market volatility. There is also a lack of understanding and education surrounding the technology, which can lead to mismanagement and loss of investments.

In conclusion, crypto currency has the potential to transform the financial world and provide users with greater financial freedom and security. However, it is essential to proceed with caution and to educate oneself on the risks and benefits of this technology before investing or transacting in it.

Additionally, the adoption and widespread use of crypto currency are still in its early stages, and its long-term viability is uncertain. While some view it as a potential alternative to traditional currencies and a store of value, others see it as a speculative asset with limited practical use. Another concern with crypto currency is its impact on the environment. The mining process used to create and verify crypto currency transactions consumes vast amounts of energy, contributing to carbon emissions and climate change.

Finally, the constantly evolving technology and the emergence of new cryptocurrencies and blockchain platforms can make it challenging to keep up with the latest developments and identify potential risks and opportunities. In summary, while crypto currency has the potential to offer significant benefits, it is not without its challenges and uncertainties. As with any investment or financial decision, it is crucial to carefully consider the risks and benefits and to seek expert advice when needed.

SUGGESTIONS



Research: Before investing in any crypto currency, it is crucial to conduct thorough research to understand the technology behind it, its potential uses, and its risks and benefits.

Diversify: Investing in a diverse range of cryptocurrencies can help spread risk and minimize potential losses in case of a market downturn.

Choose reputable exchanges: When buying or selling cryptocurrencies, it is essential to choose reputable and secure exchanges to ensure the safety of your investments.

Understand the risks: Cryptocurrencies are still a relatively new and volatile asset class, and their value can fluctuate widely. Therefore, it is important to be aware of the risks and to invest only what you can afford to lose.

Keep up with the latest developments: The crypto currency market is constantly evolving, and new cryptocurrencies and blockchain technologies are emerging. Staying up to date with the latest developments can help identify potential opportunities and risks

BIBLIOGRAPHY

- 1. <u>https://www.google.com/url?sa=t&source=web&rct=j&url=https://www.oswego.</u> <u>edu/cts/basics-about-crypto</u> <u>currency%23:~:text%3DA%2520crypto</u> <u>currency%2520is%2520a%2520digital,you%2520need%2520a%2520crypto</u> <u>currency%2520wallet.&ved=2ahUKEwipsoSv_p_-</u> <u>AhUmnFYBHewFAbMQFnoECBMQBQ&usg=AOvVaw2_xJYeS1-</u> <u>mZJD8i2rWLM4v</u>
- 2. <u>https://www.google.com/url?sa=t&source=web&rct=j&url=https://www.investopedia.com/terms/c/cryptocurrency.asp&ved=2ahUKEwipsoSv_p-AhUmnFYBHewFAbMQtwJ6BAgaEAE&usg=AOvVaw2c8cSvRKsTgulvZ5F4x<u>1L3</u></u>
- 3. <u>https://www.google.com/url?sa=t&source=web&rct=j&url=https://en.m.wikipedi</u> a.org/wiki/Crypto currency&ved=2ahUKEwipsoSv p -<u>AhUmnFYBHewFAbMQFnoECFwQAQ&usg=AOvVaw35B2HW7hO6rgbTSO</u> <u>o-2BM9</u>
- 4. <u>https://www.google.com/url?sa=t&source=web&rct=j&url=https://www.kaspersky.com/resource-center/definitions/what-is-cryptocurrency&ved=2ahUKEwjWqazJ_p_-AhW0sFYBHT1VAC8QFnoECCgQAQ&usg=AOvVaw31xY9lbzjWrBHt-5OXttA3</u>
- 5. <u>https://www.google.com/url?sa=t&source=web&rct=j&url=https://www.forbes.c</u> <u>om/advisor/in/investing/crypto</u> <u>currency/types-of-crypto</u> <u>currency/&ved=2ahUKEwir5JjR_p_-AhV6p1YBHX-</u> <u>dDPoQFnoECAoQAQ&usg=AOvVaw1SwH1S9XEv6C2_TzrrGfJs</u>

- 6. <u>https://www.google.com/url?sa=t&source=web&rct=j&url=https://www.investopedia.com/terms/c/crypto_currency.asp&ved=2ahUKEwj9lYHY_p_-AhW-s1YBHQ70BZwQtwJ6BAh8EAE&usg=AOvVaw2c8cSvRKsTgulvZ5F4x1L3</u>
- 7. <u>https://www.google.com/url?sa=t&source=web&rct=j&url=https://www.investopedia.com/terms/c/crypto</u>
 <u>currency.asp%23:~:text%3DThe%2520advantages%2520of%2520cryptocurrencies%2520include,and%2520use%2520in%2520criminal%2520activities.&ved=2ahUKEwjcnY7k_p_-</u>
 <u>AhWUnFYBHf5mAg0QFnoECBYQBQ&usg=AOvVaw2c8cSvRKsTgulvZ5F4x1L3</u>
- <u>https://www.google.com/url?sa=t&source=web&rct=j&url=https://www.geeksforgeeks.org/advantages-and-disadvantages-of-cryptocurrency-in-2020/amp/&ved=2ahUKEwjcnY7k_p_ <u>AhWUnFYBHf5mAg0QFnoECFoQAQ&usg=AOvVaw0SgIswqvop_LQAOG5t</u>CN4m
 </u>
- 9. <u>https://www.google.com/url?sa=t&source=web&rct=j&url=https://www.forbes.com/advisor/in/investing/crypto</u> currency/advantages-of-crypto

 currency/&ved=2ahUKEwjcnY7k_p_

 AhWUnFYBHf5mAg0QFnoECEwQAQ&usg=AOvVaw2Z1T9SeFnNtzLx3apQ

 H-B1
- 10. <u>https://www.google.com/url?sa=t&source=web&rct=j&url=https://www.whitehouse.gov/ostp/news-updates/2022/09/08/fact-sheet-climate-and-energy-implications-of-crypto-assets-in-the-united-states/%23:~:text%3DCrypto%252Dassets%2520are%2520digital%2520assets,communities%2520living%2520near%2520mining%2520facilities.&ved=2ahUKEwij5NH2_p_-</u>

AhUJIFYBHbZpBFkQFnoECA8QBQ&usg=AOvVaw3SqJWF_hnqG1SbQ2JYk 3XM

11. <u>https://www.google.com/url?sa=t&source=web&rct=j&url=https://groww.in/blog/factors-affecting-value-crypto</u> currency%23:~:text%3DIf%2520there%2520is%2520a%2520limited,irretrievabl e%2520address%2520inside%2520the%2520blockchain.&ved=2ahUKEwijgsr-_p_-AhWRqFYBHapZBCwQFnoECA8QBQ&usg=AOvVaw0_2ivoBOKbNhV8JUP pwQX7

ANNEXURE

Q.1. What is your Gender ?

1. Male

2. Female

Q.2. What is your Age?

- 1. 18 24 years
- 2. 25 40 years
- 3. 41–56 years
- 4. Above 57 years

Q.3. What is your profession?

- 1. Student.
- 2. Employee.
- 3. Businessman or Businesswoman.
- 4. Home maker.
- 5. Self employed.
- 6. Other.
- Q.4. Are you familiar with the concept of crypto currency?
 - 1. Yes
 - 2. No

Q.5. Have you ever invested in crypto currency before?

- 1. Yes
- 2. No

Q.6. If yes, what was your experience with crypto currency investment?

- 1. Positive
- 2. Negative
- 3. Neutral

Q.7. If no, what is the reason for not investing in crypto currency?

- 1. Lack of knowledge
- 2. Lack of interest
- 3. Concerns about safety and security
- 4. Other (please specify): _____

Q.8. Which crypto currency have you heard of the most?

- 1. Bitcoin
- 2. Ethereum
- 3. Binance Coin
- 4. Dogecoin
- 5. Other (please specify): _____

Q.9. How do you perceive crypto currency in terms of its safety and security?

- 1. Very safe and secure
- 2. Somewhat safe and secure
- 3. Neutral
- 4. Somewhat unsafe and insecure
- 5. Very unsafe and insecure

Q.10. What do you think are the advantages of investing in crypto currency?

- 1. High potential for returns
- 2. Diversification of investment portfolio
- 3. Independence from traditional financial institutions
- 4. Other (please specify): _____

Q.11. What do you think are the disadvantages of investing in crypto currency?

- 1. High volatility and risk
- 2. Lack of regulation and oversight
- 3. Limited acceptance and usability
- 4. Other (please specify): _____

Q.12. How likely are you to invest in crypto currency in the future?

- 1. Very likely
- 2. Somewhat likely
- 3. Neutral

4. Somewhat unlikely

5. Very unlikely

Q.13. What sources of information do you rely on to make investment decisions in crypto currency?

1. News and media

2. Social media

3. Crypto currency exchanges and forums

4. Financial advisors

5. Other (please specify): _____

Q.14. How do you think crypto currency investment compares to traditional investments like stocks or real estate?

1. Higher potential for returns

2. Lower potential for returns

3. Similar potential for returns

4. Other (please specify): _____

Q.15. What factors do you consider when deciding whether to invest in crypto currency?

1. Price trends and market analysis

2. Technical features of the crypto currency

3. Reputation of the crypto currency and its development team

4. Other (please specify): _____

Q.16. Have you ever suffered a loss while investing in crypto currency?

- 1. Yes
- 2. No

Q.17. How would you rate your overall knowledge and understanding of crypto currency?

- 1. Very high
- 2. Somewhat high
- 3. Neutral
- 4. Somewhat low
- 5. Very low