This book is the first of the Surviving & Thriving series. This was created to help you take your first steps into Bitcoin, Blockchain & The Metaverse. In this book we cover the information you need along with actionable steps you can take right now. Following this book we will be providing deeper insight into future topics for the more advanced reader. After the completion of this book you will be equipped with the proper knowledge to take actionable steps as well as become the more advanced reader and truly understand the information that comes with our books later in the series.

"To The Empires We Build"

# - Contents -

Introduction:	
Surviving & Thriving: Bitcoin, Blockchain & The Metaverse	1
Chapter 1:	
What Is Bitcoin And Why It's The Future of Finance.	9
Chapter 2:	
Why You Need To Learn About Bitcoin NOW!	24
Chapter 3:	
How You Can Benefit From Bitcoin RIGHT NOW!	46

Chapter 4:	
What Is Blockchain?	63
Chapter 5:	
Why You Need To Learn About Blockchain NOW!	69
Chapter 6:	
How You Can Benefit From Blockchain RIGHT NOW!	76
Chapter 7:	
What Is The Metaverse?	87
Chapter 8:	
Why You Need To Learn About The Metaverse RIGHT NOW!	99
Chapter 9:	
How You Can Benefit From The Metaverse RIGHT NOW!	112

The Introduction

# - Introduction -Surviving & Thriving: Bitcoin, Blockchain & The Metaverse

Surviving And Thriving: Introduction

In the not-so-distant past, there was nothing like internet technology. Regardless of how old you are, you have experienced the transformative power of modern tech. You most likely have even undergone such a transformation either as a consumer or a participant. Either way, new technologies are shaping the global digital economy daily.

Possibly, you've seen the large-scale transformation in how we learn, work, and entertain ourselves. Technology can change everyone's lives in countless ways. Namely income, consumer culture, entertainment, industry, and even the national economy.

Like the internet itself, bitcoin and blockchain technology are rapidly transforming the world of finance, investing, and technology. One salient point is that everything related to finance as we know it is changing and will continue to change.

Are you properly prepared with the knowledge and information to survive and thrive in the future? If so, then you don't need this book, and I wish you the best of luck in your endeavors. On the other hand, if you don't have the slightest clue of where to turn or how to conceptualize what is going on with this blockchain technology, this book is for you, and I implore you to soak in this knowledge to better prepare yourself for an inevitable future.

By taking the step to educate yourself, It's safe to presume you have heard about bitcoin and/or blockchain, the metaverse, etc. in some capacity, and you don't want to be left behind.

In the past, when a revolutionizing technology or opportunity spawned, it was only initially available to an elite few who had inside connections and had the funds. This is not the case with blockchain. Access to the blockchain, cryptocurrencies, and the metaverse is not exclusively reserved for today's wealthiest individuals, families, corporations, and nations of the world. Access to this world of web 3 is open and available to anyone with access to the internet.

The potential benefits of this space are not reserved exclusively for any set of people. The most significant limitation that halts most people from getting involved is access to information. If you are not equipped with the proper knowledge YOU. WILL. FAIL, much like anything in life. Unfortunately, limited knowledge of how the new world of Web3 works is still a significant barrier to entry for many people.

Before now, the gap in understanding might have held you back from the benefits and opportunities of blockchain technology and cryptocurrencies. Like the vast number of people I have presented to, I know you have some (or many) unanswered and confusing questions about these emerging technologies. I'd wager that you don't even know where to start looking. You probably see business guru after business guru trying to sell a course on how to make millions in minutes – "How I turned 1000 into 100,000." Stop, don't pass go, you will lose hundreds (if not thousands of dollars). Ask me how I know.... But that's what I'm here for, so you don't need to make the same mistakes I did.

I get it, some concepts and unanswered questions about all of this created a barrier between you and all the hype you hear about online and in the news.

Maybe you're telling yourself it's a scam or that it's too late. Be honest with yourself. Why would massive companies start adopting bitcoin, blockchain technology, and metaverse integrations? This technology is making people real money, and it's still in its adolescence.

The first thing I need from you before going deeper into this book is to be available for new ideas. If you can't accept that this technology is revolutionizing every industry, again, this book isn't for you. From beginning to the end, the desired strong foundation to survive and thrive is what you'll get in this book. Irrespective of your background, you'll

have a solid base to explore the opportunities within your reach. You just need to "reach."

Seriously...

Before we get into the technical details, it is essential to acknowledge that the new world of finance is volatile, mainly because it is so unique. It's risky. And you can lose it all in seconds. That's why you need to think about surviving first before looking to thrive.

If you lose your capital on speculative gambling, you'll have nothing to build and thrive on as a beginner. Also, in the case of not getting proper information, all you're doing *is* speculative gambling. While it is essential to be cautious, taking advantage of the best growth opportunities requires intelligent decision-making. Fortunately, this book will help you build the foundation for that intelligence. If you put in the time to understand everything I am going to show you, I will teach you the foundation of several things:

**Getting In Early (And Yes, You're Still Early)** - One of my favorite proverbs from the deep wisdom of Chinese scholars goes as follows: 'The best time to plant a tree was 20 years ago. The second best time is now.' Imagine that you invested a few hundred dollars when the price of bitcoin was under \$100. How different do you think your financial status would have been by now if you held your investment, when bitcoin has already been well over \$50,000? Just pause and think about it for a moment. The same thing that happened to the value of bitcoin is already happening with multiple different currencies. But not every coin is going to be bitcoin. Now, if you had the knowledge needed to identify bitcoin as a significant opportunity, you would have been an early adopter and probably wouldn't need this book. So you need to position yourself with the proper knowledge in this industry to make it worth your emotional and financial investment.

### The Introduction

*Start Positioning Yourself* – Getting in early is one thing. Taking the correct position is entirely different. That's why you need to follow the guidance of someone who has been in the field for over nine years. The position you take today will determine your future outcome in terms of profit or losses. This book provides beginners with a trusted source of valuable knowledge to build that foundation and get started.

**Overcome Common Entry Barriers** - For most people, it is neither the lack of resources, potential, or opportunity that holds them back. Lack of knowledge and confidence are the two most significant barriers. In the end, this book will give you the ability to overcome these often impassable barriers for many.

**Discover Different Opportunities** – When it comes to the new world of bitcoin, blockchain, and the metaverse, there is never one size that fits all. Different investment vehicles and opportunities offer a variety of choices for a variety of investment strategies. Blockchain technology is being adopted in every industry, creating the opportunity for everyone to get involved in different ways. Beyond what you know now, many other opportunities abound within the space. Your challenge is to find the best ones that will be a perfect match for your background, interest, goals, and risk profile. That's part of what you'll discover.

*Investing In Crypto Knowledge Is Profitable* – Knowledge is critical, all of the most prominent people in finance constantly proclaim how they never stop learning. Bill Gates, Warren Buffet, and so on will tell you how much they read and consume knowledge daily. Beyond knowledge acquisition, this book can put you in a position to prosper in the coming technology revolution. If you have the knowledge to advance in these fields, you are ahead of everyone else who refuses to even acknowledge it. The next step with knowledge is implementation which is precisely what we are setting you up for. You will no longer be constrained by the knowledge barrier after this book, and you will be extremely better off as a result.

After nine years, I have built up quite a bit of experience within this space... The good, the great, the bad, the ugly, and the hideous. I've been up 1000% down 1000%, you get the picture. That's why I wanted to put out this book. I wish I had a reliable, straightforward set of knowledge to build my foundation. But through my ups and downs and extensive technology experience, I can provide that for you. With the experience gained from using diverse blockchain technologies and investing my own money, the insights shared in this book will put you on the right path with the knowledge in navigating this space. The gains, dips, losses, and unpredictable fluctuations, I've seen them all. But now, you don't have to follow the same complex and risky path as I did starting.

Helping to foster an increased understanding of how the Web3 ecosystem works and providing a bridge from the unknown to the known is why I started, and it's why you're here too. As you go through this book, I will cover information and opportunities that fit everyone's profile, and that's the most remarkable thing about this space. There is an angle for everyone to play.

Before getting started, consider this:

## I am sure you have read crappy crypto books.

When you read a shallow book and still don't get what you want, those knowledge gaps you acknowledged are likely to remain unfilled. That's why you need a sufficiently detailed book with trustworthy and practical knowledge with verifiable facts. Not to mention books with inadequate information could leave you in a worse position than when you started. Causing you to make poor choices stemming from an inadequate and rocky foundation.

# You are actively interested in the best and updated crypto books for beginners.

## The Introduction

Instead of boring you with complex information before you are ready, I will break everything down so it makes sense. It was a lot to comprehend when I started, and all of the new technology was extremely difficult to understand. My goal is to use understandable language and analogies to explain everything in a way you'll appreciate as someone who is just getting started. In this case, there is no need to worry about complex concepts that might be hard for you to comprehend and understand. If you have ever searched for the best and most beginner-friendly crypto and blockchain books, this book is right for you.

# You don't need expensive online courses. Or the dreaded "crypto gurus."

Maybe you have seen one or two courses and concluded that this is too expensive for me. They are typically costly, and not to mention, you never know if they genuinely have your best interest or if their information is as accurate as they say. Then you could scour the internet and spend who knows how long sifting through the quality and not-so-quality information, then have to figure out which is which? I have gone through tons of courses, and I'm embarrassed to admit yes, I have worked with the supposed gurus. I've spent a lot of money, (lost a lot of money), gained good knowledge, and gained lousy knowledge. I've filtered and condensed some of the most extraordinary knowledge that took me 9 years to attain and put it into this book to help you get started and not have to deal with all of the negatives I experienced.

## You have what it takes to get started today.

In terms of resources and willingness to take on certain levels of risk, you have what it takes to get started today. But then, a simple lack of practical knowledge might have been your most significant barrier. As long as your interest in this space remains strong, the insights you'll gain here can get you started with what you have now. There is no longer any need to wait or be hesitant about the opportunities within the blockchain, cryptocurrency, and metaverse spaces.

## You want to minimize potential risks.

Why should you follow someone who has been in the space long enough to know what is risky and what is not? Even though there are great opportunities for outstanding ROI, you want to minimize your exposure to different levels of risk. Don't dive head in first. Take this book as a guide written specifically for you to properly start building a reliable foundation of knowledge on an emerging and exciting new technology.

# - Chapter 1 -What Is Bitcoin And Why It's The Future of Finance.

# What Is Bitcoin?

Bitcoin is a form of digital currency that uses computational processes for the storage of value, exchange of value, and peer-to-peer transactions. Unlike other types of money or currencies that have emerged in the financial services industry, bitcoin is not physical. It's 100% digital. Every transaction record is stored on a publicly accessible network that uses cryptographic and encryption technology.

Regardless of geographic location, anyone from anywhere around the world can own and exchange bitcoin for their local currency, otherwise known as a fiat currency. However, the transactions and ownership units are not within the control of central banks or private bank corporate institutional regulations.

In other words, bitcoin transactions are not stored in a traditional ledger system.

When you own a unit of bitcoin, you can access your funds through a digital wallet and personalized access keys. Instead of using a traditional ledger, units of ownership, ownership agreements, bitcoin transactions are stored in an encrypted public network. Contrary to being owned and controlled by central banks or corporations, the digital ledger system is decentralized.

Many people across the globe use bitcoin for different types of transactions. For example, you can buy physical products online and pay with bitcoin in

select stores where the digital currency is accepted. Even as a seller of different products or services, it is a good idea to recognize that

bitcoin might be the currency of the future (or one of them) and consider how to utilize it in transactions.

Before proceeding, I want you to acknowledge that bitcoin is just one of many available digital currencies or digital coins. As a beginner, it's easy to assume that bitcoin is the be-all-end-all of cryptocurrency. While this is true to some extent, it is not the only coin or form of digital currency.

# Alternative Crypto Currencies Other Than Bitcoin

- Litecoin
- Dogecoin
- Bitcoin Cash
- Ethereum
- Stellar
- Tether
- Monero
- XRP
- Binance coin
- USD coin

# How Bitcoin Started

For different reasons, you might have had an active interest in learning how bitcoin started. Let's explore the brief history of bitcoin as a digital currency. I believe that an increased understanding of the original principles will make it easier to comprehend other related concepts discussed in this book.

## - Chapter 1 -What Is Bitcoin?

Following the 2008 global recession, public trust in private banks declined significantly. In many financial circles around the world, it is believed that the blockchain white paper published by Satoshi Nakamoto was inspired by the publicized large-scale accounting fraud which led to the fall of many banks.

In that white paper, the proposed invention represents an alternative financial system through which everyday individuals can conduct transactions without the involvement of private banks, central banks, or the government of any country.

That white paper was published on October 31, 2008. Satoshi's writing described a new digital cryptocurrency named Bitcoin, which will be used as a peer-to-peer cash system. Instead of relying on traditional third parties, bitcoin was made to depend on cryptographic digital technology to maintain trust, stored value, and transaction integrity.

Originally, the first bitcoin was invented and published in 2009 as open-source software. Then on January 12, 2009, the first bitcoin transaction was recorded. Dr. Craig Wright, whom many believe to be the same as Satoshi Nakamoto, sent ten bitcoins to Hal Finney, a renowned cryptographic expert.

The first unit of bitcoin existed as a block (genesis block) in a public ledger system. That ledger system works as a digital chain of blocks of data, containing cryptographic hashes or codes.

In simple terms, a hash is an algorithm-based function that meets the encrypted demands needed for a completed blockchain computation. Besides transaction verification, one of the key functions of the hash is to maintain the integrity and anonymity of information passing between senders and recipients in the blockchain network.

Technically, the block and hash are made up of mathematical algorithms meant to perform different functions. Remember what I said earlier that the

first bitcoin was invented as an open-source code. This was the humble beginning of bitcoin.

## How Bitcoin Works

Based on the original definition in Satoshi's white paper, bitcoin is a form of digital money or cryptocurrency. Unlike physical cash, it is a form of a computer file or algorithm meant for specific functions like definition, measurement, storage, and transfer of value. As a form of digital currency, bitcoin works as a chain of blocks of information that is not within the control of any central bank or corporate institution. Through the public ledger system, the blockchain, people can conduct financial transactions without physical contact or physical exchange.

At any given time, owners and users of bitcoin can initiate a peer-to-peer( or person to person) transfer of measurable bitcoin value from one digital wallet to another. There are no time-bound restrictions as there is with the traditional financial markets or systems. For any reasons, people can buy bitcoin in exchange for fiat currency, transfer the bitcoin to their digital wallet and then use that bitcoin to transact with other bitcoin holders. That's why cryptocurrency exchanges exist in the first place.

There is also a bitcoin acquisition process called mining. But we'll get to that later.

Another important thing about how bitcoin works is that completed transactions are irreversible. As a beginner in the crypto space, this is fundamental to the nature of a decentralized currency.

Five Core Characteristics of Bitcoin

### - Chapter 1 -What Is Bitcoin?

**Transaction Transparency:** On the public ledger system or blockchain, every transaction has a high level of transparency. However, only authorized users with the right access keys can view the details of each bitcoin transaction. Moreover, being publicly accessible reinforces the credibility of every party involved in each bitcoin transaction. Consequently, as more blocks are added to the chain, the entire ecosystem becomes even more valuable and secure.

**Execution Speed:** Based on its technology, people can send and receive bitcoin across the globe within a few seconds or minutes. The absence of the need for third-party verification or authorization protocol (like in a traditional bank transaction) makes it the fastest means of transferring money. Besides, transaction fees are comparatively lower. And that's one of the biggest advantages of using bitcoin instead of traditional money transfer systems.

**Decentralization:** There is no central authority controlling how bitcoin works globally. Anyone from anywhere in the world can become an active participant and beneficiary of the blockchain. Even as an independent business owner, you can decide to start accepting bitcoin as means of payment for your products or services. Interestingly, you don't need permission from any government or corporate institutions before using bitcoin to accept payment. In that same way, you can buy, sell, own and store bitcoin in a digital wallet without authorization or verification from any financial authority.

**High-Level Security:** One thing that makes bitcoin safe and secure for everyone is the simple verification of user-profiles and transaction history. Depending on the crypto wallet or exchange involved, you can easily conduct a transaction with anyone from anywhere worldwide. In other words, most transactions are safe and secure, given how blockchain technology works.

**Anonymity And Privacy:** Most Bitcoin users are represented with alphanumerical wallet addresses and access keys. What it means is that

every user is completely anonymous. This level of anonymity is what makes the transaction private and secure. Based on the fact that people don't use their real identity information, neither the government nor corporate institutions can trace the identity of people behind a bitcoin transaction.

# What Is Proof of Work In Blockchain?

Proof of work is a consensus mechanism used to authenticate and store bitcoin transactions in the blockchain. This mechanism is the core part that underpins the dependability of bitcoin as a digital currency. Hence, there are no third parties involved in transaction verification. Technically, proof of work is a system that rewards bitcoin miners for using computational resources to verify and add new transactions to the blockchain. Through this mechanism, people who participate in the mining process earn units of predetermined bitcoin value for adding recent transactions to the blockchain.

Another way to look at it is this. Every bitcoin transaction initiated in the blockchain network exists as a block. In other words, you can say that these are blocks of transaction records. However, confirmation of each transaction requires the generation of a target hash.

Remember, the thing being sent is a digital currency. But since there are no traditional third parties involved, transaction verification depends on the proof of work mechanism.

Just like you do not need to fully understand how an engine works in order to drive a car, you do not need to fully understand how the blockchain works in order to use it!

How Bitcoin Is Made – What Is Bitcoin Mining?

## - Chapter 1 -What Is Bitcoin?

As a form of digital money, you might be wondering how bitcoin is made. Like physical cash, there are numerous ways to earn bitcoin. This section will focus on three major ways of making or owning bitcoin. With an increased understanding of how bitcoin mining works, you will get on the path to earning this digital currency.

# What Is Bitcoin Mining

Bitcoin mining is the process of solving computational puzzles that leads to the creation of varying amounts of new bitcoin. The main purpose of mining is to verify bitcoin transactions initiated between two parties within the blockchain network and to earn a reward for doing the same. In simple terms, there are anonymous third party people (called miners) who verify the ownership, transfer, amount and when a bitcoin transaction happens and adds this information to the ledger or blockchain. This mining process is a competition among individuals and corporations interested in making some fractional amount of bitcoin for "mining," just like they make physical fiat money.

Even though cryptocurrency mining is an interesting field of economic activity, participation requires a significant investment in computing equipment and expertise. Moreover, profitable mining demands that the cost be lower than the value of bitcoin earned within a specific duration.

Here are some pointers on how bitcoin mining works. However, it is important to point out that people with the expertise and equipment can also get into mining other cryptocurrencies.

**Consumption of High Computing Power:** Besides the requirement for specialized computers and other equipment, mining consumes a lot of computing power. In addition to this, you'll need sufficient electricity and a cooling system to keep the entire operation running round the clock.

**Incentivized Competition:** The blockchain network works like a lottery. In this case, miners use highly complex computer systems to compete for a 64-digit hexadecimal number in computational guesses. This number is known in the crypto world as a hash. Any competing miner that gets the correct hash at any given instance earns a stipulated bitcoin value.

**Voluntary Contribution** – The computing resources and power needed to keep the blockchain network running are never contributed or dependent on a single authority. Contrary to this, most people buy their hardware and software for mining bitcoin. When these requirements are available, you have to invest in the workforce to ensure that your mining activities are profitable. The key point is that contributing such computing power and resources is voluntary. Once you have the know-how, you can start mining bitcoin from any part of the world.

## Accepting Bitcoin Payments

Here is the second option that some people use to make bitcoin. If you have been asking questions about how to earn bitcoin, this is one of the best options for you. Interestingly, it is simpler than bitcoin mining. The process is to start accepting bitcoin payments for your product sales or service delivery. Like physical cash, you can use it to buy other types of goods and services.

The benefits of accepting bitcoin payments include the following.

- 1. Instant cashflow
- 2. Lower transaction fees
- 3. Easy implementation
- 4. Fraud protection
- 5. No chargebacks
- 6. Anonimity

The best bitcoin payment processors include Coinbase, Bitpay, CoinGate, CoinsBank, Go Coin, and BitCoin Pay. Please get in touch with financial services experts or professional developers before implementing these processes.

### - Chapter 1 -What Is Bitcoin?

# How Does Bitcoin Combat Inflation?

Regardless of geographic location, inflation is one thing that usually decreases the value of financial assets. Even when a huge amount of money is saved in the bank, inflation will always harm the value of that money. Based on this fact, many people are constantly looking for ways to hedge against inflation. Historically, combating inflation is among the core motivating factors behind the invention of bitcoin. Below is a preview of contextual information on how bitcoin combats inflation.

## Secure Storage of Value

One of the inflation-resistant characteristics of bitcoin is decentralization. Being inflation-resistant means that bitcoin is secured from the inflation-inducing alterations that may arise from the decisions and actions of central authorities in an economy. In other words, the central economic authorities in any economy can induce inflation, either intentionally or otherwise. Some of the specific economic actions that may lead to inflation are highlighted below.

- Rising wages
- Fiscal policy making
- Devaluation
- Economic regulations
- Political infractions

## Limited Bitcoin Supply

Bitcoin is said to have a limited supply of 21 million coins. Because of this limited supply, it is nearly impossible for new coins to enter circulation after all are created. Contrary to this fact, an increased supply of physical money in circulation is an influential cause of inflation. Factors that may lead to an increased fiat money supply include increased government spending and

printing more money to finance budgets. In this regard, bitcoin is resistant to inflation, unlike physical cash.

## It's Not Tied To A Single Economy

The inflation rate in one country is rarely the same in another. When you look at the major causes of inflation, some or all of them might be happening simultaneously within a particular country's economy. Like other financial asset classes, bitcoin is not prone to economic alterations in any country. Interestingly, it is an internationally recognized financial asset class that many people leverage for profitable diversification. If you want to diversify your investments in multiple classes in addition to real estate, stocks, and bonds, bitcoin is one of the most valuable crypto assets.

## What Is Decentralized Finance?

Decentralized finance uses the open-source ledger system to connect interested parties for financial transactions without the involvement of intermediary authorities that charge fees or impose rules or regulations on multiple ends.

Bitcoin or cryptocurrencies are an alternative financial system that refers to the collection of finance-related products and services accessible to anyone through the blockchain network. As an open-source network, no central authority can claim ownership or control how decentralized finance (DeFi) works in any part of the world. DeFi is an emerging global financial system with proven potential to reshape the future of finance.

Now, you may be wondering, how can I position myself to survive and thrive in that inevitable future? Before getting into the potential opportunities for participation, let's look into how DeFi works.

#### - Chapter 1 -What Is Bitcoin?

# How Bitcoin Introduced Decentralized Finance

As the first cryptocurrency, bitcoin was originally invented to work with a distributed or decentralized digital ledger system. Subsequently, other cryptocurrencies, especially Ethereum (another cryptocurrency that provides utility), which is now leading the acceleration of DeFi, were invented based on the original principles of decentralization. Instead of relying on centralized authorities, the execution of financial transactions is driven by the participation of active users of the blockchain network. In technical terms, such execution is based on two principles.

**The Consensus Mechanism:** This computational system is used to achieve mutual agreement, trust, and security between participants in a blockchain network. In the bitcoin blockchain, the consensus mechanism is also referred to as proof of work (PoW) as previously discussed. The core function is to maintain the integrity of distributed and anonymous users participating in a cryptocurrency transaction.

**Self-Executing Smart Contracts:** Smart contracts are computer algorithm-based digital contracts containing the transactional agreement between two interested parties (buyer and seller). Technically, these contracts are simple lines of code used to execute specific transactions in a blockchain network and provide utility for the cryptocurrency. Since the transacting parties are never physically present, encrypted smart contracts are used to maintain trust, transaction integrity, and security of financial assets.

What decentralized finance (DeFi) did was extend the diversity of financial transactions beyond what was originally introduced through bitcoin. Now, how can you benefit from the emergence of decentralized finance?

**Borrowing:** You can securely obtain different types of loans. The interesting part is that you don't have to go through cumbersome paperwork and then wait for endless time. The speed of borrowing is fast and secure.

**Lending:** Depending on your interest, you may want to lend out your crypto funds and earn stipulated interest within a specified duration. It is up to you to decide how much you are willing to lend. In recent times, decentralized lending platforms have created financial opportunities for everyday people.

**Trading:** Without the involvement of traditional exchanges, you can start trading decentralized financial assets of your choice. Think about it like buying and selling stocks in a reputable and secure exchange. Again, these are some new opportunities created through decentralized finance and blockchain technology.

**Saving:** You can decide to save your fiat money in cryptocurrencies and earn interest on the funds. The only requirements are a digital wallet and some funds. The interesting part is that your savings are not prone to the constant effect of inflation that devalues other types of financial assets. These are some, not all, of the opportunities you may want to explore through the emergence of decentralized finance. The best part is that you can start exploring some of these financial opportunities from anywhere worldwide. And you don't need permission from any centralized monetary authorities.

Centralized vs. Decentralized Finance: What Is The Difference?

One of the best ways to understand the potential benefits of decentralized finance is through a comparative perspective. Based on that perspective, you can relate the core concepts to your personal experiences. And that's an interesting way to identify specific opportunities that may suit your personality or current financial aspirations. Let's look at the core differences.

### - Chapter 1 -What Is Bitcoin?

## Third-Party Involvement

In a decentralized financial ecosystem, there are no third parties involved in transaction verification and authorization. Instead of central authorities, transaction verifications are based on the computational agreement (smart contracts) between distributed users in the blockchain network. The absence of third parties also increases transaction speed and efficiency.

## **Control Mechanism**

Decentralized finance gives control of activities to every individual participating in each transaction. With a digital wallet, passwords, and access keys, you'll have 100% control of your cryptocurrencies. This is opposite to the regulatory actions of financial authorities in a centralized system which can change rules, cause inflation and market alterations.

## **Exchange Fees**

The absence of third parties in a decentralized system lowers financial transaction fees. The voluntary contribution of distributed computing resources needed to keep the blockchain network running lowers operation costs and transaction fees. The opposite of this system is when greedy private and central banks are involved and demand higher and higher fees over time.

## Anonymity

In the traditional financial system, identity verification is one of the major things that takes a lot of time and money. In contrast, the blockchain is based on a permissionless system, the anonymity of participants in a crypto transaction is maintained.

## Hacking Vulnerability

A single point of failure can affect the entire network in a centralized system. The reason behind the system's vulnerability is the centralization of the computer resources required to keep everything running. But the blockchain is decentralized, and the probability of data leaks and cybercriminal attacks is near zero.

These are the core differences between the two financial ecosystems. People like you are already taking advantage of opportunities in the new world of finance. The best time to start positioning yourself is now. Since we have defined what bitcoin is, how it is made, and other basic concepts, we are ready to move on to the next chapter.

# - Chapter 2 -Why You Need To Learn About Bitcoin NOW!

Before 2009, bitcoin used to be an idea in someone's mind. Through a series of research, experimentations, and trial and error, bitcoin has become a proven means of storing and exchanging value. From that figment of the imagination, it is now part of people's normal lives across different parts of the world. Against all odds, bitcoin also serves as a livelihood for many people in different countries.

Just pause for a minute and think about the emergence of blockchain-powered startups and venture capital firms over the past few years.

As a form of a financial asset, the value of bitcoin has grown from \$1 in 2011 to over \$60,000 in 2021. However, it is important to acknowledge that digital currency often produces some unpredictable fluctuations. That's one reason you should commit to learning as much as you can about the first and most popular cryptocurrency.

Based on the above facts, one obvious thing is that people who invested earlier reaped the largest rewards. Now, you may be tempted to start wondering if the time to get involved has passed already. The answer is no. This technology still has plenty of room to grow, and while you may be late to the party, it's only just begun.

But you need to learn as much as you can about how the entire system works. The following section discusses why you should start learning now instead of later.

You Can Profit In Different Ways

Unknown to you, you may already have the resources that will give you an edge in the world of cryptocurrency and bitcoin. Now I want to ask you this: If you have what it takes to start profiting from bitcoin now, why wait till tomorrow? How long have you been waiting?

More than anything else, one of the biggest barriers between most people and the potential profit they can earn from bitcoin investments is the lack of knowledge of how the entire system works. And that's why you should start learning now, not later. The earlier you get in, the better for you, your family, and your friends.

Interestingly, there are different ways you can start profiting from bitcoin. The beautiful part is that you don't have to spend years learning about the technical principles or technologies behind the digital currency to get involved. I am not a financial advisor and this book and its contents are not financial advise. Here are some ways I and other people have interacted with bitcoin or other cryptocurrencies.

**Buy And Hold** – If you believe that bitcoin will increase in value, buying and holding is one of the easiest and beginner-friendly ways to earn profit from bitcoin. Like physical real estate, the coin you buy and hold has some potential for value appreciation. Depending on how long you decide to hold the coin, the profit will become the purchase and sale price difference. It is one of the best passive bitcoin investments you can make with your money. Like other forms of investment, you decide how much you are willing to risk and invest.

In an article written by Megan DeMatteo for Time Magazine, it was reported that bitcoin reached an all-time high of **\$68,000 per coin** in November 2021. The digital coin has been fluctuating at different price points between then and now. When you think about the price movement from \$1 in 2011 to its current price, what is the potential for the price in the future? You decide. But rest assure, there is no going back on bitcoin adoption worldwide, including where you live now.

#### - Chapter 2 -Why You Need To Learn About Bitcoin NOW!

If you decide to take advantage of this option, these are the steps to follow.

- 1. Decide how much you want to invest
- 2. Create a bitcoin wallet
- 3. Put your money in the wallet
- 4. Wait for as long as you want

The best crypto wallets to hold your bitcoin includes Gemini, Coinbase, Exodus, Crypto.com, Kraken as well as many others. You can select any one and start holding your coins with it.

**Start Bitcoin Trading** - Instead of waiting for potential value appreciation over a long period, trading will allow you to earn bitcoin profits both in upward and downward market trends. Technically, it is a process of buying and selling bitcoin through a reputable exchange. At this point, you may have all it takes to start trading bitcoin, but if you don't have sufficient knowledge of how to make it profitable, the possibility of losing your invested money will be higher.

If you have any idea about forex trading, Bitcoin is similar. Based on the level of technical analysis required to make profitable trades, you have to commit a plethora of time to learn about trading. Assuming you have always been interested in trading or earning bitcoin, now is the best time to start.

At the time of this writing, the best crypto trading exchanges depending where you are in the world include the following.

- Binance
- FTX
- Gemini
- Coinbase Exchange
- BitStamp
- Gate.io
- Bittrex

• Korbit

**Bitcoin Affiliate Marketing Programs** - Do you have any knowledge or experience in affiliate marketing? If your answer is yes, you may have what it takes to start profiting from bitcoin today. The fact that you have this type of knowledge or experience is a good reason you should commit to learning how bitcoin affiliate programs work. Even if you don't have any idea of affiliate marketing, committing to learn how it works will put you in a position to earn bitcoin profits from online-based affiliate marketing activities.

Affiliate marketing in this context is about promoting crypto-related products, apps, and services in exchange for a defined reward paid in bitcoin or other cryptocurrencies.

Each merchant or service provider will define how their unique affiliate program works in most cases. While some will reward you for getting prospects to sign up for their services, others will only pay you some bitcoin value when a registered customer completes a transaction.

At this point, it is worth clarifying that crypto-related affiliate programs are not limited to bitcoin only. Besides bitcoin, some companies will pay with different digital coins like Ethereum, Litecoin, and others. The most important thing to bear in mind is performance-based marketing. That means you'll only get a reward for your performance in the program. If you learn enough about how crypto affiliate programs work, you can start profiting from any of those programs today. Again, the earlier you start, the better the chances of making meaningful profits.

**Interest-Earning Accounts** - Instead of keeping your coins idle in a digital wallet and waiting for value appreciation, you can put them in special interest-earning accounts. Like every other type of interest deposit in the traditional financial system, the potential profit you earn will be dependent on the invested amount. Higher deposits will always earn a higher amount.

#### - Chapter 2 -Why You Need To Learn About Bitcoin NOW!

However, the interest rates often differ from one platform to the other. By investing in this type of deposit, you'll be doubling your value with appreciation and defined interest rates.

Depending on the platform, you can choose from daily, weekly, or monthly payout of earned interest. Based on the original idea of cryptocurrency, the essence of the special accounts is to help depositors protect their funds from fluctuations, inflation, and devaluation that erodes the value of conventional currencies.

Unlike traditional deposit accounts, there are no transfer fees or minimum deposit requirements. Moreover, you'll be able to calculate the potential interest earnings for different deposit amounts and interest rates before putting your coins. Most times, the interest rates vary from one platform to the other. The interest rates are usually between 3 - 35%, depending on the platform. But one thing you have to bear in mind is that the type of cryptocurrency and holding duration influences interest rates. Check the exchanges mentioned above for their interest rates on deposited funds.

**Decentralized Finance -** There is a whole new world of finance developing which allows you to lend and borrow cryptocurrencies and make considerable profits. The incredible thing about these platforms is that the majority of them do not require any identifying information from you, such as your name, address, social security number, etc. The participants are only identified by their digital wallet addresses. Such platforms include aave.com and curve.fi. A full tutorial on DeFi is beyond the scope of this book as a full understanding is required to assess the risk.

# Blockchain Is Set To Disrupt Different Industries

If you are still considering whether it is viable to get involved in bitcoin and blockchain or not, think again. One reason you should start learning and

positioning yourself now is that blockchain, the technology behind bitcoin, is set to disrupt different industries.

Regardless of the industry your livelihood depends on, blockchain technology is or will probably cause some disruptions, and it is set to do more of it soon. From financial services to healthcare and a host of other industries, blockchain technology is set to cause even more significant disruptions. The right investment in any of the companies bringing blockchain technologies to these industries could produce significant gains over time. Let's look at a few examples.

## **Real Estate**

In the real estate industry, identity verification, market data analysis, and transaction authentication take excessive time, which slows down the entire process. This is because transaction documentation processes are still paper-based in most parts of the world. Here are some examples of the things that blockchain technology will change in the real estate industry. Contrary to being paper-based, some forward thinkers are already leveraging digitization, computational algorithms, and smart contracts to speed up real estate transaction processes.

The most popular application of blockchain technology in this context is the tokenization of real estate.

In simple layman's terms, tokenization is about breaking real estate ownership (equity) into smaller units (digital tokens) to make it accessible to many investors. In this context, you can say that blockchain, the underlying technology, is already changing how people invest in real estate. Now you and everyone else can start investing in tokenized real estate or real estate crowdfunding without waiting for the accumulation of sizable initial capital.

Assuming you are in the real estate industry already, committing to learn more about bitcoin and blockchain technology can give you an edge in the

#### - Chapter 2 -Why You Need To Learn About Bitcoin NOW!

changing marketplace. Perhaps, you may want to leverage debt and equity tokens to finance your next real estate project.

Where traditional intermediaries often charge higher fees and slow transaction processes, leveraging blockchain technology will increase market liquidity and transaction speed. The beautiful part is that you may not have to drive from one location to another just to inspect properties and maintain transaction integrity.

## Healthcare

On a micro and macro level, medical data storage influences the overall quality of healthcare services. Even though a lot has been achieved in medical data digitization, there is still a high probability of error, fraud, and lost records. One reason for this is the intricate authentication and access authorization processes that many healthcare service providers still use.

Using blockchain technology's data decentralization and secured authorization capabilities, some healthcare providers are already gaining great advantages across the board. The trust-building systems will record significant improvement when healthcare service providers begin to embrace the wide adoption of blockchain technology.

Some startups like Ontology (<u>www.ont.io</u>) are already leading the way to improved trust-building, privacy, and data security. If you are in the medical field, learning more about how the ecosystem works will put you in the right position to survive and thrive in the tech-driven future of healthcare.

## Insurance

From financial services to transportation, hospitality, healthcare, retail, and information technology, many industries rely on insurance services to stay afloat. Besides, insurance is one industry that relies heavily on trust and usability of real-world data. Think about how blockchain can be used for

insurance claim verification by leveraging artificial intelligence (AI) and distributed ledger systems; a California-based company called Lemonade offers low-priced insurance to homeowners and renters alike.

On the other hand, some experts have cited the transmission of digital evidence for insurance underwriting as another area poised for disruption. As more innovative companies continue to adopt blockchain technology, the insurance industry, varying levels of process automation, cost savings, and business model innovation will unfold within this industry.

However, gaining the first-mover advantage requires that you begin to learn about bitcoin and blockchain technology now. Assuming you are actively working within the insurance industry, this is something you have to take seriously more than before.

# You Can Start Accepting Bitcoin Today

If you learn enough about how cryptocurrencies work today, you may start accepting bitcoin today as a means of payment. On the other hand, ignorance of how the system works will keep you and your business excluded from the benefits of accepting bitcoin payments. As noted earlier, lack of knowledge about how the entire ecosystem works is the biggest barrier that keeps millions of people excluded from the potential benefits of bitcoin as a means of storing and exchanging value. It doesn't matter the type of product or service your business provides for customers; you can start accepting bitcoin today. Even as an independent consultant, nothing stops you from accepting bitcoin payments either through your website or a manual process.

The Business Benefits of Accepting Bitcoin Payments

No Fraudulent Chargebacks

#### - Chapter 2 -Why You Need To Learn About Bitcoin NOW!

The reason why people initiate chargebacks often varies from one context to the other. According to a study reported on the Coingate website, around 80% of all chargebacks in the United States are filled wrongfully. In some cases, many ill-intentioned people take advantage of consumer protection laws to get a refund for products or services already purchased and used.

How chargebacks work is that when some people buy certain products or services using a credit card or other online payment systems, they initiate a refund through their bank. When banks complete such refunds, most merchants lose money or profit.

The tricky part of such a refund is that banks can make it happen without the knowledge or permission from the merchants who own the business accounts involved. Originally, the law backing chargebacks was intended to protect consumers against fraudulent and exploitative charges. Unfortunately, many people use the same law against online retailers and service providers.

Contrary to what is obtainable in the traditional financial system, a bank cannot initiate or complete a refund out of a bitcoin account without the merchant's permission. In essence, lower chargebacks are beneficial to merchants who accept bitcoin payments.

## **Lower Transaction Fees**

The absence of intermediaries in crypto transactions often results in lower processing fees. One of the key reasons for higher fees in the traditional monetary ecosystem is the participation of varying third parties in transaction verification and authentication. When the payment flow happens between two distant countries, the fees are usually higher. In some cases, both the sender and receiver of funds pay fees to have the transaction processed successfully.

Because of the computational power of blockchain technology, bitcoin transaction fees are significantly lower. Unlike the traditional system,

transaction fees hardly go above 1%. If your business processes a large volume of transactions and you are paying high fees, you have to consider this.

## **Increased Control of Business Funds**

The nature of bitcoin gives account owners maximum control over their funds at any point in time. When you are using traditional payment processors to sell products and services, access to your funds is restricted for some time. In other words, you cannot have immediate access to funds received from the sale of your products or services in most cases, such as with credit card payments. The reason behind such restriction is compliance with existing financial laws. The payment processors have to comply to stay in business.

With bitcoin, you can have immediate access to and control the funds in your merchant account. And when the funds are in your account, no third party or financial regulatory authority will gain access or control without your permission. For example, you'll never experience anything like Paypal or Stripe restricting access to your funds without explanation and for any length of time.

## **Maximum Fraud Protection**

In today's age and time, a cybercriminal can intercept the flow of business funds. Besides, identity theft and similar data breaches can give some criminals access to financial information, often resulting in the loss of funds. In contrast, the anonymous payment system in the blockchain ecosystem protects both the consumer and merchant. Customers don't have to use personal information to make a purchase. And merchants don't have to pay the price of costly data breaches. All transactions require the purchaser (or sender) to utilize their secret key for each transaction.

#### - Chapter 2 -Why You Need To Learn About Bitcoin NOW!

Another thing that adds to the strong layers of the security system is the decentralization of financial data storage and processing. No single authority or corporation is responsible for storing and protecting the data. And that's what makes stealing customer data and merchant funds nearly impossible.

## **Faster Money Transfer**

Based on the traditional banking laws, transferred funds have to stay on hold for some days or weeks before getting to the intended recipient. The reason for this is very simple, intricate verification processes by intermediaries involved in transaction authentication. Moreover, the variation in financial laws from one country to another also adds to the complexity.

As a business owner, you need a dependable cash flow system to pay your bills and stay afloat. In this case, a little delay in funds transfer can cause problems in your operating processes. Conversely, the funds sent via bitcoin can arrive in minutes. Now imagine how much faster fund transfer and accessibility will impact your current business operation.

Do you have a business that requires constant transfers across borders?

Now is the time to start learning as much as possible, especially how to start accepting bitcoin payments.

## **No Surprising Currency Conversion Fees**

Irrespective of the recent advancements in financial technologies, or FinTech, sending money from one country to the other still has some bottlenecks. If not for anything else, the participation of different third parties often results in undesirable delays and costly currency conversion fees. Again, here is another area where cryptocurrency and blockchain technology proves more beneficial than the traditional system.

In addition to the increased level of transaction transparency, you don't have to deal with any international currency conversion surprises. Where some small fees are involved, you'll be made aware of everything from the beginning.

## You Need An Alternative Investment Vehicle

As I have observed in different circles, most people do not look for alternative investment vehicles by accident. Assuming you have been investing in or considering the traditional financial markets for some time, there is a chance you've had some experiences that made you start looking for viable alternatives.

And that's what this section is all about. Below are some factors that influence the need for an alternative investment. Perhaps, these are good reasons why you should start learning about the cryptocurrency market today instead of tomorrow.

## Diversification

Having all your investments in a single asset class, industry, or location is extremely risky. For example, you may have 100% of your investments in the stock market. But when the entire stock market in a country is affected, your stock investments will also be affected. In this case, you may want to diversify by investing in different types of assets like real estate or cryptocurrency.

The other way to look at diversification is by industry. Even when investing in the stock market, you can diversify your portfolio by spreading the investments across different industries like healthcare, financial services, technology, transportation, energy, and food.

#### - Chapter 2 -Why You Need To Learn About Bitcoin NOW!

However, if you have been investing in some traditional asset classes or industries, you should consider cryptocurrency as a viable alternative. And that's why it's important to start learning about it now instead of later.

## Affordability

Besides the lack of knowledge, one of the biggest barriers that prevent many people from taking advantage of investment opportunities is the huge capital required to get started. For example, traditional real estate investment is commonly capital intensive. This exact barrier drives the average retail investor's active search for affordable alternative investment vehicles.

Whether starting with interest-bearing crypto accounts, trading cryptocurrencies, or investing in tokenized real estate, the crypto market offers many alternatives for beginners and experienced investors. Let's say that affordability has been a barrier for you. Now you can begin to learn how to take advantage of crypto alternatives.

## **ROI** Potential

You need a better alternative with proven potential for great ROI. That's why you are looking for alternative investment vehicles. According to Business Insider, the average S&P 500's ROI over the last ten years stands around 14%. The annual return rate is about 10%. Below these average numbers, millions of investors still struggle to earn meaningful profit from their investments. That's why some of them are actively looking for alternative investment options.

Regardless of your background, it is important to note that achieving above-average ROI from crypto investment alternatives requires a certain level of knowledge and experience. Without sufficient knowledge and experience, you may end up in wasteful gambling or speculation.

These are some factors driving the active search for alternative investment vehicles.

# Bitcoin Is The Leading Cryptocurrency

There are many coins in the cryptocurrency market. For most beginners, the diversity of cryptocurrencies makes the entire ecosystem overwhelming. Somehow, you may feel overwhelmed and start asking questions like this: Where should I start? Should I start with the high or low-value digital currencies? Which one has the potential for maximum ROI? Interestingly, one statement seems to answer all these questions above.

Bitcoin is the leading cryptocurrency. Based on this fact, you don't have to continue asking the question – where should I start? As the leading currency in the global crypto market, here are some pointers on why you should start learning about bitcoin now.

## #1: The Coin Maintains Its First-Mover Advantage

Whenever you mention cryptocurrency, the first thing that comes to mind for most people is bitcoin. Originally, the advent of the cryptocurrency industry and decentralized finance started with bitcoin. The outcome of its first-mover advantage includes popularity and community around the coin. In technical terms, bitcoin benefits from the power of the network and affects every other digital currency in the market.

Another dimension is the inflow of new funds into the bitcoin network. From institutional and individual investors alike, the volume of funds flowing into the bitcoin network because of its popularity is significantly higher.

## #2: Wide Application of The Underlying Technology

#### - Chapter 2 -Why You Need To Learn About Bitcoin NOW!

The underlying blockchain technology that powers bitcoin was designed for multiple use cases from day one. As an open-source software platform, many developers across different parts of the world can access bitcoin's blockchain technology for different purposes. Having gone through different levels of development iterations, more and more smart developers are finding new use cases for bitcoin and the underlying technology.

As discussed in the previous sections of this book, it is not just about finance and money. The accessibility of bitcoin's open-source platform supports applying the technology across other industries like insurance, healthcare, real estate, and agriculture.

When you talk about the application of blockchain technology across other industries, the premise is not far removed from the original principles behind bitcoin.

## #3: Bitcoin Is Relatively More Stable

More than any other digital currency in the industry, Bitcoin has stood the test of time. In contrast, some of the newer competing coins are still going through the test of viability and stability. Even though the coin has undergone its turn of downward and upward fluctuations, it has become more stable than many other digital currencies that come to mind. It makes sense to spend your time learning about the cryptocurrency that's comparatively more stable than its competitors!

# The Digital Currency Landscape Is Risky

Bitcoin investment is not 100% risk-free. Yes, that's the truth. It doesn't matter what some experts or finance gurus might have told you. There are some elements of risks involved when getting involved with bitcoin. Whether you are investing your funds or accepting bitcoin payments in your business, it is important to make yourself fully aware of the potential risks.

With a sufficient level of awareness, you prepare for the risks or minimize them where possible.

Some of the potential risks you should watch out for include:

## Minimal or No Regulation

The absence of regulatory authorities in bitcoin transactions is a major source of risk concern for new individual and institutional investors. When disputes or fraud arise, there are no third-party authorities to help with a mutually fair resolution. There are no consumer protection laws in the world of bitcoin and cryptocurrency. Think of what happens with consumer protection laws that back legal chargebacks. The same doesn't apply to bitcoin transactions. In most cases, you are 100% responsible for the outcome of your decisions, whether wrong or right.

This is why you should commit enough time to learning as much as you can about investing in bitcoin or accepting it as means of payment in your business. Most central banks and financial regulatory authorities worldwide have different opinions or dispositions about cryptocurrencies.

## **Overreliance On Technology**

Besides bitcoin itself, a big part of the core operations is dependent on technology. For example, the exchange companies that build cryptocurrency and storage platforms heavily rely on technology. Consequently, the data centers and computer systems that exchanges are run on are prone to physical attacks and advanced cybercrime. Given potential events like these, you risk losing your funds if anything happens to an exchange where you store your cryptocurrency.

## **Tax-Related Complexities**

#### - Chapter 2 -Why You Need To Learn About Bitcoin NOW!

Fundamentally, anything that has to do with tax is usually challenging for average individuals and business owners. Even though there is minimal regulation regarding the ownership and use of bitcoin, the tax-related issues around bitcoin still look like murky waters for most people. Unfortunately, you might be prone to a tax consequences if you are not informed enough about your country's bitcoin, finance, and tax-related laws.

## **High Volatility**

The cryptocurrency market is extremely volatile. With strong conviction by those supporting and those opposing bitcoin as well as the lack of regulations and market manipulation, this volatility will continue for some time. As more and more countries and governments adopt and recognize bitcoin as a digital currency, volatility should lessen. The best thing you can do in this case is to invest for the long term. Regarding how volatile the market is, you need sufficient knowledge and experience to earn good profits.

# Bitcoin Adoption Rate – Factors Affecting Bitcoin Adoption

Since 2009, the number of people using bitcoin has surpassed 200 million. Remember that this number started from zero. In that same vein, cyber security threat has been rising worldwide. Unfortunately, that continued rise is threatening the security of assets under the control of traditional banks, new fintech companies, corporations, and government regulatory authorities. This section will explore the factors influencing the adoption of bitcoin and other cryptocurrencies across the world.

# **Rising Cyber Security Threats**

If you have not experienced it today, there is a good chance you'll experience it tomorrow. The continued rise in cybercrime does not respect family, corporate, or government authorities. Regardless of your current

status, you cannot rule yourself or your business completely out of the possibility of a cyberattack. Across any country you can think of, cybercriminals are making victims of everyday individuals, small businesses, big corporations, and government authorities.

For example, imagine cybercriminals disrupting Colonial Pipeline's fuel distribution across the easter part of the United States. According to a Cyber Threats Report highlighted in Fortune Magazine, government authorities worldwide saw a 1,885% increase in ransomware attacks. As different types of cyber security threats continue to spread worldwide, many people are actively looking for ways to secure their funds and assets. This is a core reason that the adoption of bitcoin has continued to rise.

## **National Currency Devaluation**

Within a particular country, the government in power may decide to devalue the national currency for several reasons. Sometimes, most countries do it to reduce sovereign debt burdens, boost exports or shrink trade deficits. Whatever the key motivating factor might be, when a country devalues its currency, it affects the overall value of financial assets in that country. And in most cases, it is rarely beneficial to the masses. Instead of waiting for the value of their assets to be eroded over some time, many people prefer to shift to cryptocurrencies.

Interestingly, this is possible because cryptocurrencies like bitcoin are not particular to any specific country. If your country is devaluing its currency, bitcoin can help you safeguard your funds.

## **Participation of Institutional Players**

Participation of institutional investors is another key factor that influences the rising adoption of bitcoin and other cryptocurrencies. When deep-pocket investors move big money into bitcoin, it makes headlines. One example is when MicroStrategy, a renowned cloud computing firm,

#### - Chapter 2 -Why You Need To Learn About Bitcoin NOW!

invested about **\$450 million** in bitcoin. Other notable institutional investors who invest in bitcoin or bitcoin derivatives include Tesla, Coinbase, Rothschild Investment Corp, and Ark Investment Management LLC.

The point here is that when reputable names invest in bitcoin, it signals trust in the future of the cryptocurrency. As more and more people begin to trust the coin, adoption continues to rise across different countries.

# **Countries Adopting Bitcoin**

Unless you live under a rock, there is a high probability that someone around you is invested in or using bitcoin and other cryptocurrencies. Even though it is a form of digital currency you can use from any location, the adoption rate varies from one country to another. In case you are still wondering whether it is a viable alternative to fiat money or not, understanding the adoption rate across different regions and countries will help you decide if it is worth exploring further.

On a global scale, the adoption rate has grown upwards of 880% over the past year. This data was revealed in the global crypto adoption index report done by Chainalysis. No matter where you live, neglecting to learn about bitcoin now will keep you excluded from being a part of the future of finance. Driven by the fear of missing out, the need to combat inflation, and reduced reliance on the dollar, El Salvador became the first country to adopt bitcoin as a national legal tender on June 9th, 2021.

That bold step inspired political leaders across South and Latin America, and others to consider adopting bitcoin as the number one cryptocurrency in their respective countries. Some notable countries include Panama, Paraguay, and Brazil.

In the global crypto adoption index of 154 countries, Africa and Asia are not left out in areas where crypto adoption is growing rapidly. Countries like

Vietnam, India, Nigeria, and Kenya were leading the pack regarding crypto adoption rates.

## **Business Adoption**

One of the most interesting facts about the global crypto adoption index is the focus of the studies behind it. Instead of institutional investors that command large volume transactions mostly in a short timeframe, the studies focused on savings and transactions between individuals. The reasoning is that high transaction frequency daily will drive the continued adoption of cryptocurrencies, not large volume one-time investments. Consequently, as everyday consumers continue to use bitcoin and other digital currencies across the 154 countries studied, businesses of different sizes are beginning to see the adoption of bitcoin as viable payment options.

Within the United States alone, over 30% of small and medium-sized businesses accept bitcoin payments. This was indicated in a report published by Business Wire. Even big businesses and reputable corporations are beginning to adopt bitcoin payments. It is worth noting that the bitcoin adoption rate across developing countries is even higher than what's happening in the United States.

On the other hand, most big companies accepting cryptocurrency payments are operating within the US. The obvious fact is that they lead the way for others to follow.

Some major companies accepting bitcoin payments for their business include the following.

- PayPal
- Overstock
- Microsoft
- Newegg

#### - Chapter 2 -Why You Need To Learn About Bitcoin NOW!

- Starbucks
- Whole Foods
- Twitch
- Home Depot
- Rakuten
- Dish Network
- AT&T

How Bitcoin Paved The Way For Blockchain Technology

In the year 2004, before the invention of bitcoin, Hal Finney, an American computer scientist, and developer, introduced a reusable proof of work (PoW) mechanism for non-exchangeable hashcash in exchange for an RSA-signed token. If you wonder, hashcash is an earlier version of the PoW system meant to prevent denial of service attacks and email spam. Dont worry if you do not understand the technology, just be aware that the beginnings of bitcoin dates back to 2004.

To a large extent, this is the concept on which the invention of bitcoin and blockchain technology was based. Historically, Hal Finney was also known as the first Bitcoin recipient in the first-ever crypto transaction.

Through the publication of Satoshi Nakamoto's white paper, which introduced the idea of a decentralized digital currency, the concept of a "chain of blocks" was born. From the onset, the concept of a digital currency in that paper was aptly named bitcoin. On January 8, 2009, bitcoin V0.1 was released as open-source software.

Following the transfer of 10 bitcoin from Satoshi to Finney on January 12, 2009, the idea of a digital currency, originally named bitcoin, became a reality. The early developers created a Bitcoin-Dev interactive chat channel for discussion and news within the developer community to support the open-source platform.

These developments increased awareness about the potential of blockchain technology and the workability of decentralized digital currency, starting with bitcoin.

And that was how the blockchain technology revolution started. As such, it provided a potent ground for creating other digital currencies and applying the technology across diverse industries beyond banking and finance.

# - Chapter 3 -How You Can Benefit From Bitcoin Right Now!

#### - Chapter 3 -How You Can Benefit From Bitcoin RIGHT NOW

How do I benefit from bitcoin?

Here is one of the most common questions that beginners ask. Beyond some obvious options known to almost everybody, there are multiple ways of making money from bitcoin. And that's what this chapter is all about. At the end of this chapter, you'll find one or two ways to suit your current financial capacity and interests. Assuming that unavailability of huge capital has prevented you from taking advantage of investment opportunities, bitcoin and other cryptocurrencies are worth exploring.

Depending on your professional background, some of the bitcoin money-making opportunities discussed here might be a perfect fit for your experience and skill set. Possibly, there won't be any long learning curve for you.

Besides highlighting some of the best ways to make money out of bitcoin, we'll also touch on the requirements for getting started. Moreover, it is important to understand some of the potential risks involved.

# **Bitcoin Trading**

What Is Bitcoin Trading?

Bitcoin trading is speculating on the price difference, buying and selling bitcoin or other digital currencies through a reputable exchange. Like traditional public company shares, you are simply buying low and selling high to make some profit. Interestingly, trading is one of the best ways to start benefiting from bitcoin. Depending on how well you have studied the market, profit can be made when you sell higher than what you buy. Without sufficient knowledge and experience, you are prone to losing your money in the bitcoin trading venture.

## **Bitcoin Trading Requirements**

**Starting Capital:** You must set aside a certain amount of money to buy and sell bitcoin for profit. Because the market is highly volatile, most experts recommend starting with an amount you can afford to lose. As your experience grows over time, you can increase the amount available for trading cryptocurrencies on any platform. With \$100, you can start trading bitcoin on some of the most reputable exchanges. The best part is that you are not subject to high fees like when trading public company shares.

**Bitcoin Wallet** – The first step is to make some money available. When your money is ready, the next step is to create a bitcoin wallet where you'll store your digital currencies. In most cases, the crypto exchange you'll use for trading will also provide you with a digital wallet. Assuming you have a wallet already, you have to convert your funds into bitcoin and move into that wallet.

**Trading Account:** Besides holding your coins in a digital wallet, you need an account created specifically for trading. After creating the account, you must fund the amount you set aside for trading. Inside each cryptocurrency exchange, you'll see some account funding methods available for new and old traders.

**Identity Verification:** Before allowing you to trade bitcoin, most platforms demand that you verify your identity. You can use an international passport or any other government-issued ID acceptable on the platform you want to start using. When your identity is verified, you can start buying and selling bitcoin for profit.

**Skill And Experience:** To earn real profit from bitcoin trading, you need the prerequisite skills and experience. Regardless of your skill level, some trading platforms provide practical training from experienced professionals. Moreover, you may want to research to find some premium training content.

#### - Chapter 3 -How You Can Benefit From Bitcoin RIGHT NOW

## Best Bitcoin Trading Platforms

Even though it is hard to bring one or two platforms and call them the overall best, below are some of the most reputable platforms that have proven themselves as titans in the space. Between these exchanges, you are bound to find some differences. For example, the minimum trading amount differs from one platform to another. Some of them will even get you started with zero dollars. Be sure to check which platforms operate in your location.

- 1. Crypto.com
- 2. Coinsbase
- 3. Binance
- 4. Kraken
- 5. tradeStation
- 6. BlockFi
- 7. WeBull
- 8. Etoro
- 9. Gemini
- 10. FTX.US

## How To Learn Bitcoin Trading

There are different ways of learning how to trade digital currencies. The ones you choose depend on your preferences. Whether you want the highest quality content or free training courses, it doesn't take too long to find what is within your reach. For beginners and intermediate traders alike, you can learn how to trade bitcoin through the following ways.

**Platform Provided Courses:** Almost all the platforms used for trading provide free training materials. Depending on your learning preferences, you can start with articles, ebooks, or video courses. Inside Binance Academy (<u>https://academy.binance.com/en</u>), you'll find learning materials around blockchain technology, DeFi, cryptography, cyber security, and

bitcoin mining. If you want to master bitcoin trading, you can start with some of the courses provided by these exchanges.

**Demo Trading Accounts:** As the name suggests, this type of account is created on trading platforms to help beginners build useful experiences with the trading knowledge and skills they have acquired. Even when you are getting new knowledge about how bitcoin trading works, you can start putting the knowledge to work with a demo account. Instead of using your real money, the platforms will provide fake funds you can use to practice the process of buying and selling digital currencies.

**Free Youtube Videos:** This option might not be the best if you are serious about learning how to trade bitcoin profitably. However, it is still possible to find many detailed training videos from experienced traders from different backgrounds. While some are working for the exchanges, some of these people are independent traders who find it interesting and profitable to make free Youtube videos. Search for any crypto or bitcoin topic under the sun, and you will find videos from different traders and content creators. The only downside of free video content is that they are not organized like professional courses, and you can't get active support from the content creators. But what you learn from free content, you can practice with a demo account.

**Professional Traders**: It doesn't matter where you live; it is always possible to find professional traders who have been in the game for a long time. One benefit of learning from professional traders is that you'll gain from the experience of people who are actively putting their own money on the line. You can access online course marketplaces like Udemy to read the profiles of professional traders and course creators. Inside some of these learning platforms, you'll also find reviews from others who have taken the course of interest. From free to \$1,000 or more, it is possible to find some interesting courses within your budget. The benefit of learning from professional traders is that you can always get active support when needed.

#### - Chapter 3 -How You Can Benefit From Bitcoin RIGHT NOW

## **Bitcoin Trading Risks**

Contrary to what some crypto gurus will tell you, the landscape is not a bed full of roses. Regardless of who trained you or how experienced you are, bitcoin trading is inherently embedded with risk. Before you jump all in, becoming aware of the following bitcoin trading risks is extremely important. Even when you are still in the learning stages, clear awareness of these risks will help you to ask the right questions.

## **Value Depreciation**

No exchange or trading strategy will guarantee steady, uninterrupted growth of your bitcoin asset value. Based on the high-level volatility, the market value of your assets may go downward at any point in time. When the market is going through some infractions, there is nothing you can do to stop the depreciation of your asset value. Depending on the nature of the asset, the only thing you may consider is to sell off the asset at a loss. If you sell early enough, you can prevent further depreciation that will erode the value of your crypto funds.

## **Price Fluctuation**

One of the main reasons some people profit from bitcoin is the constant price fluctuation. The price of bitcoin itself and other related assets are rarely stable. To a large extent, constant bitcoin price fluctuation poses a big risk to beginners who may not experience making profitable trades. Again, price fluctuation is another factor not within your control as a trader. The best you can do is to study the price movements and stake your trades in a way that possibly produces potential profits.

## Loss of Private Keys

Yes, you can lose the private login information for your crypto wallet or trading account. Such a loss may occur by simple carelessness or force. For example, if you are robbed, and the criminals force you to reveal your

private login keys, you can lose your crypto funds or asset. Your best bet is to protect the login keys as much as possible. If possible, hide it in a private spot and avoid posting it in any written or readable form. Before making any peer-to-peer transactions, ensure that every party involved is trusted.

## **Corporate Bankruptcy Risk**

Corporate bankruptcy is when a company liquidates its assets, uses the proceeds to pay back some debt, and then goes out of business completely. Like every other corporate entity, any crypto company that holds your assets may file a legally-backed bankruptcy when it faces significant operation bottlenecks, market infractions, or the inability to pay back its total debt. The risky thing is that any crypto trading exchange may also file for bankruptcy at any time. When such a thing happens, you may lose your funds and the trading account.

# **Bitcoin Mining**

Here is another strategy you can use to start benefiting from bitcoin now. Even though it is a highly technical and resource-intensive process, bitcoin mining holds the potential for great profit if you have what it takes. In the early days of blockchain technology and bitcoin, mining was the playground for technically savvy individuals. But now, corporate entities with deep pockets have appeared on the scene, making it more appealing to new entrants.

## What Is Bitcoin Mining

Bitcoin mining is the competitive process of solving cryptographic and mathematical puzzles in exchange for a reward of digital currency, such as bitcoin. Interestingly, every miner is competing with other miners for the same reward. The essence of the mining competition is to provide proof, verify and authenticate transactions within a blockchain network. Another way to look at it is that the decentralized process works as a dependable

#### - Chapter 3 -How You Can Benefit From Bitcoin RIGHT NOW

transaction authentication protocol. Hence there are no third parties involved.

With every transaction confirmed and authenticated, the miner responsible for it will earn a reward. Based on the high energy consumption required for bitcoin mining, many individuals can hardly provide the resources required. That's why it's mostly an activity dominated by big companies. To overcome the challenges associated with power consumption, some companies are moving their operations into areas with a sufficient supply of renewable energy.

## **Benefits of Bitcoin Mining**

- Great potential for making a profit
- No debt burden to deal with
- High-level flexibility
- Transactions are immutable
- There are no third-party authorities

## **Requirements For Mining Bitcoin**

**Digital Wallet:** This is the first thing you need to start mining bitcoin. The coins you earn from mining will be stored in the wallet for future use. You can get a wallet from some of the crypto trading platforms mentioned in the previous sections of this book. From that wallet, you may wish to transfer or use your mining profits at any time.

**Computer Hardware:** You'll need a high-grade computer with enormous computing power to start. One thing to note here is that using an average computer for mining bitcoin will not work. If you go to some retail websites, you can see reviews of different computers that other people have used specifically for mining bitcoin. In some cases, you'll also see computers built with high-power consumption mining in mind.

**Bitcoin Mining Software:** The next thing needed to get started is special mining software. Even though the hardware does most of the processing work, there is a need for the software that will connect your bitcoin miner to the blockchain network. Some of the best bitcoin mining software include Multi miner, CGMiner, and Awesome Miner.

**Bitcoin Mining Pool:** This refers to a group of distributed miners who contribute computing resources for mining bitcoin over the blockchain network. Technically, you can follow the solo or pool mining route. With solo mining, you must provide all the required equipment and get to business. Following the pool, options mean that for a monthly fee, you are tapping into existing computing resources distributed across different locations. Depending on the knowledge you have acquired, you may want to start with the solo or mining pool option.

## **Best Bitcoin Mining Pools**

- 1. Binance Pool
- 2. Foundry USA
- 3. BTC.COM
- 4. F2Pool
- 5. Antpool
- 6. Pooling
- 7. ViaBTC

**Power Supply:** Sufficient power supply is also needed to put the computer hardware at the highest operating capacity. For this specific bitcoin mining requirement, the level of your operation will determine the degree of power needed. In terms of high-level corporate mining activities, it might be in your best interest to consider using renewable energy sources.

In addition to the core requirements mentioned above, you must acquire sufficient knowledge and skills to engage in profitable mining activities. If you can afford to spend the money, getting professional training will give you a strong foundation to get started. Before committing any amount of

#### - Chapter 3 -How You Can Benefit From Bitcoin RIGHT NOW

your money, please bear in mind that the same risks involved in bitcoin trading also apply to mining.

Moreover, it is important to check the existing laws in your country regarding bitcoin mining income, capital gains, and taxes. In the United States, for instance, everything you earn from crypto trading, investing, and mining are taxable, just like other types of personal and corporate income.

## Interest-Earning Accounts

Bitcoin interest-earning accounts are like traditional saving accounts. But this digital option will pay you interest for saving your currency in a particular wallet or account. Even though the interest rate might not be that much, it is one of the ways to earn passive crypto income while you are busy doing other things. In some cases, you'll have the option to compound your earnings, which will help you earn even more interest. When it comes to earning interests in this context, there are no steep learning curves to walk through or technical complexities involved. Just fund your wallet and invest whatever amount you deem suitable.

Below are the main steps to start earning bitcoin interests within the shortest possible time. Before diving in, please note that some risks are involved, similar to other bitcoin earning strategies discussed earlier.

**Choose A Bitcoin Wallet:** Some of the digital wallet providers also have bitcoin interest-earning products. Such companies make money through margin exchange trading and secure bitcoin lending. That's why they can pay interest on such special bitcoin holding and interest-earning accounts. The first step is choosing a wallet provider if you don't have one. **Compare The Interest Rates:** Compare the interest rates offered by competitors in this space. But don't look at the earning rates or percentages only. Consider the terms and conditions within each platform that offers interest-earning accounts. Because of different reasons,

including the terms of service, the interest rates hover between 2 - 15% annually.

In addition to the interest rate comparison, check the withdrawal terms and conditions. How often will each platform pay you interest? These are critical questions to keep in mind to ensure you're staying in line with your personal goals and needs.

**Create Account:** The next step is to create an account on the chosen platform. Assuming your crypto wallet provider offers interest-earning products, creating an account or signing up for this service will be relatively easy. You can have your account ready to earn interest in less than three minutes. The best platforms that pay bitcoin interest include the following.

- 1. BlockFi
- 2. Gemini
- 3. Nexo
- 4. Value
- 5. Binance
- 6. Compound Finance

**Verify Your Identity:** Identity verification is mandatory on all reputable platforms that will allow you to start earning interest. If you have verified your identity or profile in any of the platforms mentioned earlier, you won't need to redo the step again. You only need a government-issued ID and phone number to verify your identity.

**Fund Your Wallet:** After the identity verification, the next step is to add funds to your digital wallet. To cover some of the statutory platform fees, you may want to add more than the amount you want to invest. Assuming you want to start with \$100, try to add \$10 or more for fees, even though the fees may not eat up the added amount.

**Invest And Start Earning Interest** – Move the dedicated fund for this investment from your general wallet to the account created for earning

#### - Chapter 3 -How You Can Benefit From Bitcoin RIGHT NOW

interest. Before taking this step, understand the interest payment duration or frequency. While some platforms promise micro daily interests, others will pay monthly or annually. Sometimes, the interest you earn will depend on the invested amount. To get the best deals, reading reviews of each platform will enlighten you about other people's experiences on each platform.

Most importantly, don't lose your login information after you have invested in a bitcoin interest-earning account. It is worth noting that on some platforms, you can invest other cryptocurrencies besides bitcoin. One platform named Nexo claimed you could invest in 33 different digital currencies.

## Investing In Bitcoin

There are different ways you can benefit from bitcoin and other digital currencies. Investing is just one of them. And when it comes to investing, you'll find different investment strategies within the market. Where you start will depend on your knowledge, experience, and investment goals. You may want to start with smaller amounts if you are a beginner. And then grow as your experience and confidence grow. Don't dive head in with a big amount.

In this context, investing in bitcoin is about buying and holding for a long time. Technically, you are following the long-term investment strategy instead of short-term trading. For the average inexperienced beginner, buying and holding for long-term profit might be your best option. Regarding the technical knowledge required for long-term trading and consistent profits, you may not have what it takes to withstand the risks involved in short-term bitcoin trading.

If you understand how bitcoin has moved from \$0 to its current value, you may find good reasons to believe in its future potential. However, market price fluctuations are inevitable.

The key point here is that investing and waiting for a long period is one of the best ways you can start benefiting from bitcoin. But you have to bear in mind that how the market will perform in the future is unpredictable to a very large extent. Getting ahead, surviving and thriving in the future of decentralized finance may require investing more in new knowledge and experience than the coin itself.

# Accept Bitcoin Payments

It doesn't matter the country where you live, work or do business; you can start accepting bitcoin and other digital currency payments today. In some markets or geographic locations, accepting bitcoin payments may give you a great competitive edge in the marketplace. In other words, you'll be tapping into new niche markets and customer segments that prefer to use digital currencies over fiat money.

The best part is that there isn't special knowledge required to start accepting bitcoin payments for your business, products, or services. Interestingly, some big corporations are already supporting and accepting this new form of digital payment.

Why You Need To Start Accepting Bitcoin Payments

It Is Globally Recognizable – Beyond the reach of any singular currency, bitcoin acceptability knows no boundaries. Anyone from anywhere around the world can pay you conveniently with bitcoin. It may give you an entry point into international markets for your products and services as a business owner.

**Transactions Are Immutable** – Once a transaction is completed between two parties, no third-party authorities can reverse it. In this case, you don't have to deal with risky and fraudulent chargebacks that today's payment processors use to cause problems.

**Increased Control:** Even frivolous reasons like unusual revenue growth can cause some payment processors to freeze your business account and create unnecessary hardship for you, your customers, and your partners. No bank or regulatory authority can freeze your bitcoin account without notice unless you are guilty of any crime.

**Faster Payment Processing:** When it comes to business, speed makes a big difference; especially in the context of payment processing. For international business owners and working professionals, payment speed is always a high priority. Perhaps, your faster bitcoin payments can help you improve your general operation speed.

**Lower Transaction Fees:** Are you paying high transaction fees to any payment processing service provider now? And when you look at your volume, do you wish there was be a better alternative? Don't think further. Bitcoin payment processing and withdrawal fees are significantly lower. If you can cut your transaction fees by 1 - 10%, the savings might help you achieve better profitability in your business.

# **Bitcoin Lending**

Crypto lending is a decentralized financial system of lending and borrowing digital currencies in a secure and reputable blockchain network, including bitcoin. Again, without geographic limitations, you can use a crypto exchange or decentralized finance application (DApp) to start lending and borrowing digital currencies. The system uses the same proof of work concept and smart contract behind blockchain technology to make lending and borrowing accepted by a larger number of people.

Interestingly, lending and borrowing are another proven way you can start benefiting from cryptocurrencies like bitcoin now, and not later. One advantage of getting in early is that you'll begin to build up experience more than some other people who are feeling skeptical and sitting on the fence.

A typical lending transaction will involve the lender, crypto exchange, and the borrower. It would be best if you had collateral to borrow money, as it applies to the traditional financial system. On the other hand, interested parties can initiate flash loans without collateral. However, such non-collateralized loans might be canceled by the third-party exchange if there is a defaulting party. All these things are made possible through the power of the blockchain network and smart contract.

If you master crypto lending, you can take advantage of the system to build a passive income portfolio. The core advantages of crypto lending include the following.

**Easy Access To Capital:** Once you are qualified or have the collateral, you can access the loan regardless of geographic location. Moreover, there is no paperwork involved in getting the loan. Practically, the approval duration is shorter than traditional loan sources.

**Smart Contract Automation:** Most of the processes involved are technology-dependent. Using a smart contract in this context reduces the possibility of error. Besides, the concept of the smart contract makes the entire process safe for the lender and borrower.

**Earn Passive Income:** Have you been looking for ways to put your money to work instead of working long hours daily? How much you earn depends on your experience, risk tolerance, and invested amount. At the time of this writing, these are some of the best crypto lending apps and platforms in the market.

- 1. CoinRabbit
- 2. Nebeus
- 3. BlockFi
- 4. CoinLoan
- 5. SpectroCoin
- 6. MoneyToken
- 7. Binance

#### - Chapter 3 -How You Can Benefit From Bitcoin RIGHT NOW

8. YouHodler

# **Bitcoin Affiliate Income**

Crypto affiliate marketing is a process of selling the products or services of a particular company in exchange for a specified commission percentage paid in bitcoin or another digital currency. It is a mutual partnership in which a company leverages other people's resources to sell its products or services without spending money upfront. From another different perspective, it is a performance-based marketing strategy. Affiliates are rewarded only for the sales or revenue generated over a specified period.

Having seen how affiliate marketing works in eCommerce and other industries, many crypto-related companies are using this model to acquire new customers for their products and services. The most significant benefit is that you don't have to spend money out of pocket to acquire customers from affiliate marketing.

Depending on how and where you recruit your affiliates, some of these people can be sending your potential company customers from channels like search engine optimization, paid search advertising, email marketing, video advertising, display ads, and mobile advertising.

For people who want to earn bitcoin from this model, below are some of the most popular affiliate programs you can join. Assuming you have affiliate marketing experience, you can get up to speed in no time. The best part is that all these affiliate programs are free to join.

- 1. Bitcoin IRA
- 2. CoinLedger
- 3. Paxful
- 4. CoinRule
- 5. Nexo
- 6. Coinbase

- 7. Trezor
- 8. Ledger Wallet
- 9. LocalBitcoins

As you have seen in this chapter, there are multiple ways you can follow to start benefiting from bitcoin right now. While some of these models or strategies require technical knowledge, some are as simple as your current online activities. Assuming you have a cryptocurrency wallet already, you are one step into the game, showing you can do some of the things involved. Moreover, it is worth noting that you don't need much money to get in and experience some of the benefits discussed here.

In some specific contexts like affiliate marketing, you can get started with zero money. If you have existing knowledge and experience in affiliate marketing, you'll find the terrain more understandable than other bitcoin income generation strategies discussed here.

Assuming you want to start trading or actively investing for long-term profits, you must commit a significant amount of time to learning how the system works.

# - Chapter 4 -What Is Blockchain?

# What Is Blockchain? A deeper look.

In the last few years, the term blockchain has consistently been used, especially with the rise of cryptocurrencies like Bitcoin and Ethereum. In 2022, blockchain seems like the new internet. And like the internet, blockchain is here to stay. With this growing popularity, you might be wondering, what is blockchain? Blockchain is a chain of blocks that contain data.

In more advanced terms, a blockchain is a database of records securely linked together and distributed among the nodes of a computer network. It is a distributed ledger that cannot be altered that is used for recording information and transactions electronically in a digital format within a business network. It is a form of a record-keeping system that guarantees security and immutability of a record of data and a high level of trust without a third party.

# What Is Blockchain Technology?

Blockchain Technology is a structure that stores public transactional records, popularly known as blocks, in several databases (known as the chain) in a network connected through peer-to-peer nodes. This network of storage is usually referred to as a digital ledger.

# **Blockchain As A Public Digital Ledger**

As mentioned above, the storage network in blockchain technology is usually referred to as a digital ledger. Like the old record-keeping system used for tracking and recording information on products, the blockchain also acts as a public digital ledger that relies on a similar record-keeping and public verification mechanism. Every transaction in this ledger has to be verified and authorized by the digital signature of the owner, safeguarding it from hacks and tampering. This makes the information contained in a digital ledger highly secured.

In simpler terms, this public digital ledger is like a spreadsheet that is shared among the staff in a company for the record of transactional activities based on actual purchases. The interesting angle to the digital ledger is that all the computers in the network can access it. Anybody can see the data, but nobody can corrupt it. The main aim of a blockchain is to allow digital information to be recorded and shared, but not corrupted or edited. This makes the blockchain the building block for records of transactions that cannot be altered, hacked, deleted, or destroyed. Blockchain as a public ledger is used as a record-keeping system that keeps users' information secure and maintains an immutable record of all the genuine transactions executed between network participants.

# How Blockchain is Decentralized

The blockchain works on the concept of decentralization. In a blockchain, decentralization is the transfer of decision-making power and supervision from a centralized network to a dispersed

network. The centralized network could be an individual, corporate body, or a group of people. The concept of decentralization aims to reduce the level of trust that participants place in central authority and themselves and also eliminate the need or ability to exert authority over one another in ways that degrade the functionality of the network.

Decentralization in a blockchain is done by a network that is connected through scattered peer-to-peer nodes that verify the authenticity of a block before adding it to the chain. The verification of the block is done by a decentralized network of computers, which ensures that control and decision-making are not done by one individual or group of people but by an even distribution in a network eliminating the chance of bias, misuse of power, or misjudgment. Decentralization makes blockchain one step more secure for users. Due to decentralization, every transaction in the blockchain is highly encrypted and protected.

# Why Decentralization Matters

Decentralization as a concept has been in existence long before blockchain. When developing a technological network, three major network architectures are usually considered; centralized, distributed, and decentralized. While most blockchain technologies apply the concept of decentralization, a blockchain network cannot simply be classified as decentralized or not. Rather, decentralization should be considered as a standard that should be applied to all blockchain applications.

#### Here are a few benefits of decentralization:

An extra layer of security: Decentralization adds an extra layer of security to the blockchain network. In a decentralized blockchain network, whenever a new transaction takes place, it is not automatically added to the chain. Rather, it is verified by a decentralized network of computers. This adds an extra layer of security to the network because before you can tamper with the blockchain, you have to tamper with the blocks of the chain and hack into every node in the scattered network of computers.

**Distribution of authority to every member in the network:** In a decentralized network, there is no single body or group that controls the activities or decision-making process of the network. Decentralization distributes authority to every member of the network, creating a system where no one has to know or trust anyone. Each member has a copy of the same data in the form of a distributed ledger with equal power to accept or reject any member's ledger.

**Reduce weaknesses in systems:** Decentralization can drastically reduce areas of weaknesses in a system where there is too much authority given to a person or too much reliance on a group of people. This is because it eliminates the risk of misuse of power, exhaustion due to overuse, corruption, and lack of incentive to provide great services. Optimum distribution of resources: Decentralization ensures that resources are evenly distributed in a system by spreading the entire blockchain network among various nodes for optimum utilization.

# **Types of Blockchain Network**

A blockchain network can be built in 4 different ways. They can be public, private, permissioned (hybrid), or consortium blockchain networks.

## Public Blockchain Network

A public blockchain network is a completely decentralized network that is open to everyone in the world. Public Blockchain allows all members of the network to access the blockchain, create new blocks of data and validate new blocks of data. All you need is an internet connection to join the network and start validating new blocks and sending transactions. This network usually provides incentives to users who validate blocks. Bitcoin and Ethereum are two popular examples of public blockchain networks. A public blockchain is permissionless, which means that you do not need anyone's permission to join or interact with the network.

#### **Private Blockchain Network**

Private blockchains are blockchain networks that work in a restrictive environment and are controlled by a single entity. Also called managed blockchain, permissioned blockchain, or enterprise blockchain, the central authority decides who can be an authorized node in the network. Private blockchains are typically operated inside a company or organization like Hyperlerger and Ripple. For data confidentiality considerations, network sharing at the corporate level usually requires a higher level of privacy.

#### **Permissioned Blockchain Network**

Also known as a hybrid blockchain, this blockchain combines elements of both private and public blockchains. It is set up and controlled by businesses that want a semi-private network with a greater degree of flexibility. In a hybrid network, some data can be made private while other data can be made public at the same time.

## **Consortium Blockchain Network**

A consortium blockchain is a type of hybrid blockchain but with a group of people or multiple organizations at the helm of affairs of the semi-closed ecosystem rather than one. This network, also known as a federated blockchain, enjoys more decentralization than private blockchains resulting in a higher level of security and efficiency within the ecosystem.

# What Is A Crypto Wallet?

A cryptocurrency wallet is a software package that allows cryptocurrency users to store, transfer, spend and receive digital assets. Like a physical wallet, a cryptocurrency wallet allows you to store the passkey to your cryptocurrency account and provides the interface needed to access your cryptocurrencies. To use a crypto wallet, you need to have two pairs of keys: private keys and public keys. A private key is the most important part of a crypto wallet. It is the

key needed to control the wallet, and anyone who has access to this key can control the wallet and all the assets in it.

A public key is then generated from the private key and serves as the address used to send crypto to the wallet. A crypto wallet can have more than one public key but only one private one. Cryptocurrency users who hold their private key and make transactions using crypto wallets that are not hosted by a third-party (non-custodial) become their bank. The wallet is like a bank account controlled by a key that only you have and control. With the private key, you can initiate transactions as well as send and receive cryptocurrencies.

# **Types of Crypto Wallets**

There are two main types of crypto wallets; software wallets and hardware wallets. Software wallets, also known as hot wallets, are computer applications or browser extensions used to send, receive and store cryptocurrencies. Funds in the software wallets are stored online. Hardware wallets, on the other hand, are physical devices that can be plugged into a computer to serve the same purpose as a software wallet. They are sometimes called cold wallets because digital assets are stored offline. Hardware wallets are more expensive and complicated to use than software wallets. Software wallets are designed with convenience as the priority, while hardware wallets are designed for maximum security. Cold wallets, unlike hot wallets, are not connected to the internet and are less vulnerable to attacks.

# A Review of the Most Popular Crypto Wallets in 2022

With the growing popularity of cryptocurrencies and digital assets, there are now a lot of crypto wallets to pick from. We'll briefly review the 3 most popular crypto wallets in 2022:

## **Coinbase Wallet**

Coinbase wallet is one of the most popular crypto wallets in the United States and one of the largest in the world, trading more than 100 crypto assets. With a Coinbase wallet, you can store your digital collectibles (NFTs), and crypto coins in the same place.

#### Pros:

- An excellent choice for beginners who have little or no experience with crypto trading
- It offers a wide choice of cryptocurrencies; over 100 cryptocurrencies are available to trade.
- User-friendly design with easy to navigate interface
- Low minimum to fund crypto account
- Highly secured with multi-signature and 2-factor authentication.

#### Cons:

- High cost of transactions
- Limited trading types

## Ledger Nano X

#### - Chapter 4 -What Is Blockchain?

Ledger Nano X is a cold wallet designed to keep your digital assets as safe as possible. Designed as an upgrade to Ledger Nano S, the Nano X is a premium hardware crypto wallet that offers all the features of its cheaper sibling but with added features like the ability to store more significant numbers of crypto assets and Bluetooth connectivity, which makes it possible to access your wallet on your phone.

#### Pros:

- It supports a large variety of crypto coins and tokens; more than 500
- It has a relatively good battery life (8 hours)
- Bluetooth connectivity which allows you to control your wallet from your phone
- Highly secured

#### Cons:

- It is expensive
- Touchscreen not supported
- Technical user interface

# Crypto.com Defi Wallet

Crypto.com Defi Wallet is a secure, non-custodial wallet in the crypto.com ecosystem. As a non-custodial wallet, users have full control over their private keys, unlike a central custodian wallet where a third party has access. Due to the decentralization of the wallet, all transactions are processed on-chain and require a transaction fee as an incentive to confirm the transaction on the corresponding token/coin's blockchain network.

#### Pros:

- Full control over your crypto wallet and digital assets
- The creation of an account is not required to use the wallet
- Supports a wide variety of crypto assets; over 300, including Bitcoin, Ethereum, BNB, and Defi tokens
- User-friendly interface

#### Cons

- If you lose your private key and recovery phrase, you lose your wallet forever.
- Before any transaction can be made, you need to pay the transaction fee and wait for the transaction to be confirmed since the wallet is decentralized.

# - Chapter 5 -Why You Need To Learn About Blockchain NOW!

# Why You Need To Learn About Blockchain Now

Blockchain is the present and the future. With the rapid growth of this technology, there are numerous reasons you need to learn about blockchain. This technology involves a whole more than cryptocurrencies and wallets and has been transforming various industries all over the world. Introduced in 2011 in the wake of the 2008 global financial crisis, blockchain has revised computing and opened up a litany of employment opportunities.

# Here are 5 key reasons why the knowledge of blockchain is important:

### **Great career prospects**

Blockchain is here to stay and has already revolutionized how businesses operate. From banks and financial institutions to agriculture and food supply chains, to the government and health institutions, blockchain is being implemented in these sectors. In the coming days, even more sectors and organizations will adopt this technology. This means that in the coming days, the knowledge of blockchain technology would be in even greater demand than is being witnessed now. As a growing number of organizations adopt blockchain technology in different sectors, the knowledge of blockchain becomes an increasingly transferable skill. This means that if you know about blockchain, you can work in virtually every industry. Once you become a certified blockchain professional, here are a few roles that you can fill:

- Blockchain developer
- Cryptocurrency developer
- Cryptocurrency analyst
- Cryptocurrency Trader
- Cryptocurrency Research Analyst
- Bitcoin Full-stack developer
- Cyber security

Gaining the skills to meet this exponential growth in the demand for blockchain professionals is an excellent idea as it assures you of great career prospects.

#### Good income potential

As a certified blockchain professional, your income potential is outstanding due to the popular demand for the skill. According to Hired, a career marketplace for tech talents, a blockchain developer's salary is between \$150,000 to \$170,000 yearly. This massive income is not limited to blockchain developers; a blockchain analyst's average annual pay in the United States is about \$115,000 yearly. As a cryptocurrency trader in the US, you can earn as high as \$180,000 per year. Many other blockchain roles in different sectors also have very good income potential due to the exponential growth of this technology.

#### **Excellent choice of investments**

Knowledge of blockchain allows you to make excellent investments and trade smartly. Investing in blockchain index funds and blockchain tokens are great ways to benefit from blockchain technology. These investments are affordable, easy, and safe with great returns.

# **Revolution of financial transactions**

Blockchain has revolutionized the way we carry out financial transactions. With blockchain, financial transactions on digital platforms are increasing. It has also made cross-border payments seamless and safe, making it easy for businesses to receive payments from their customers irrespective of location.

#### Use in governance

Another reason why the knowledge of blockchain is necessary is its massive employment in governance and government systems. Since its launch, governments worldwide have used blockchain to ensure the security of databases, transparency of functions and processes, reduction in the cost of elections and voter fraud, increased participation in elections, and streamlined tax collection. Major countries like the United States, UAE, Australia, UK, South Korea, Israel, Russia, Germany, and many others are investing in blockchain technology to protect their databases, ensure tax compliance, and boost accountability and transparency.

# **Blockchain Adoption in Different Industries**

Blockchain happens to be reaching a new era of broader, more empirical adoption as many former hesitant leaders begin to recognize its long-term capability. A rising number of companies across more sectors are expanding and diversifying their blockchain initiatives. However, it isn't productive to generalize about adoption as no two industries seem to perceive the distributed ledger technology the same way in terms of its probability of boosting companies' respective strategic preferences. Even though each industry's blockchain mission is distinct, administrators across the board are keen to comprehend and more fully examine the technology's diverse potential.

#### **Financial services**

Years after bitcoin launched blockchain to the world, the technology continues to revamp the financial services industry in ways entirely different from its initial cryptocurrency-driven applications. The very essence of blockchain is well fitted for financial services, whose lifeblood is multiparty trades. In the past few years, firms have studied blockchain use cases to simplify and boost performance in digital payments, data validation, "know your customer"/anti-money laundering, tokenized assets, asset transfer, trade finance, and so on.

# Technology, media, and telecommunications

The ways that any individual Technology, Media, and Telecommunications sector exploits blockchain tend to be situational. For instance, telecom may employ blockchain to lessen roaming, while media corporations use it to enforce digital rights and payments to content authors. This sector seems ahead of other sectors in consortium participation (current or

#### - Chapter 5 -Why You Need To Learn About Blockchain NOW!

planned), viewpoint on the scalability of blockchain, and the knowledge of compelling use cases as they seek blockchain's potential in driving significance, confidence, and transparency.

#### Life sciences and health care

There may be no sector where blockchain can have a more instantaneous, significant effect than in life sciences and health care, where data clarity, speed of passage, immutability, traceability, and trustworthiness are fundamental. Already, industry participants point out blockchain's vast influence in such aspects as clinical collaboration, claim submission and adjudication, longitudinal patient data, patient-reported outcomes, and beyond. Respondents cite information access and distribution as their most preferred blockchain use cases, yet they name interoperability and implementation as top adoption roadblocks.

# Energy and Resources (E&R)

Proofs of concept are underway in a wide range of E&R areas: metering, billing, and security; decentralized energy trading; wholesale energy trading; access to wholesale energy markets for end-use customers; grid management; internet of things-based asset management; and e-mobility. These projects currently tend toward the downstream end of the value chain; upstream processes tend to be more capital-intensive, with concerns about blockchain integration with legacy systems, perhaps making it a tougher sell.

#### Manufacturing

Blockchain capabilities may help alleviate common supply chain pain points. For instance, the technology's auditability may reduce questions about traceability. It can lessen adherence issues, given the immutability of all transactions. Disintermediation can encourage and promote trusted peer-to-peer transactions. Suffice to say, blockchain can play and influence a prominent role in advancing supply chain evolution.

# **Blockchain Technology And Real Estate Tokenization**

With the growing acceptance of blockchain technology, the real estate industry has not been left behind in adopting blockchain. The use of blockchain technology in real estate is becoming more popular by the day as the advantages of this technology are being widely understood. Blockchain is changing real estate transactions as it provides a secured, decentralized way of recording and transferring ownership of assets through tokenization. In the blockchain, tokenization is converting an asset's value into a digital token that can be used on a blockchain application. Using this process, you can transform indivisible assets into digital tokens.

In Real Estate, tokenization provides a more seamless way to sell and acquire property. For example, if you want to sell a property worth \$10 million, finding someone who can afford to pay such an amount might be challenging. With blockchain, this is made more accessible. If you tokenize the property, you can find multiple people with whom the ownership of the property is shared. The property can be converted into 1 million tokens worth \$10 each. In this way, each

token represents a percent share of the property. A significant advantage of this is that it allows you to cut out intermediaries in the buying and selling process, giving buyers and sellers of real estate the ability to transfer ownership directly. Transfer of real estate ownership is made as easy as buying a pair of shoes on the internet. Also, tokenization of real estate assets is made available to a global audience. Tokenization removes the barrier of location in owning and keeping track of assets. With a computer and an internet connection, you can buy percentage shares of a property and monitor it from anywhere in the world.

Asset divisibility is another benefit of blockchain to the real estate industry. With tokenization, you can own a property with ten other people and agree on how the property will be used and other modalities. Another advantage of blockchain technology in real estate is that it removes the inherent barrier to entry into the industry. Due to the expensive nature of properties, real estate is typically limited to wealthy investors with large amounts of capital. With tokenization, individuals can buy real estate in small percentages and denominations with no barrier or additional costs. One significant advantage of the blockchain is the security and transparency of transactions. Blockchain technology is known to be decentralized and secured. Tokenized assets are the same. In a blockchain, it is possible to know the previous owner of an asset as all transactions are transparent and available to everyone in the network. This increases trust in the asset among potential buyers. Transactions are automatically stored in the blockchain, and the immutability and transparency enabled by decentralization in the blockchain network help guarantee the authenticity of each token.

# Use of Blockchain Technology In Everyday Life

Blockchain is here to stay and is already revolutionizing how we do things in our day-to-day activities. The application of this technology has cut across various verticals, and the consumer is feeling its impact. Many industries are trying to secure their transactions and activities using blockchains, and the effect can be seen in our daily life.

Here are a few examples of the way blockchain technology is being used in everyday life:

#### To ensure the safety of public records by government officials

This is one of the biggest ways that the impact of blockchain technology is being felt in everyday life. Since its launch in 2011 and exponential growth in subsequent years, the government sector has been actively working to harness this technology's full potential and power. The government operates the largest storehouse with the record of every individual in a country and is, therefore, a target for hackers. With blockchain technology and the decentralization of data, the government can tighten its security network to guard against any breach. This has helped many government agencies reduce single point of failure (SPOF) risk and cyber breaches. A real-life example is how the Government of Estonia is using blockchain technology to protect its data by joining hands with one of the leading ICT companies, Ericsson, to create a new center for database storage and management so that its public data can be moved to a blockchain.

#### - Chapter 5 -Why You Need To Learn About Blockchain NOW!

#### **Reduce Voters Fraud and Streamline the Tax Collection Process**

In public administration and electioneering, blockchain is being applied to everyday life. The government is now using blockchain technology to ensure greater transparency in elections as well as to reduce voter fraud. Advantages of this include the reduction in the cost of elections, maximum voters' privacy, the ability to securely vote online, and an increase in voter turnout. An example of this is FollowMyVote, an initiative of the United Nations launched in 2012 for tracking elections.

Another way this technology is being used is in the tax collection process. Using blockchain, government organizations have been provided with a way to link an individual's tax data with income transactions. This makes it easier to calculate their tax deductions, streamlining the tax collection process.

#### **Improve Business Process**

In the business world, especially in the retail industry, the blockchain is massively employed in business processes to store transactional data and smart contracts. Using smart contracts, which are in the form of smart properties or smart codes, many e-commerce businesses have been able to automate various tasks and improve multiple processes like inventory management, payment options, advertising, and many more by using blockchain technology in their e-commerce software.

#### **Secured Digital Financial Transactions**

In the financial sector, blockchain is being employed to provide adequate security in digital transactions which is a key requirement for FinTech (Financial Technology companies). It is being used to automate payment processes, activate smart contracts, and enable high-speed financial transactions.

In 2022, a lot of software companies are using blockchain technology to build FinTech apps that are highly secured and one step ahead in the financial sector. Many of these companies have made cross-border payments a seamless experience with blockchain technology. A good example is Flutterwave, a FinTech based in San Francisco that allows banks and payment providers to receive funds securely and easily anywhere in the world using blockchain technology.

# Why Is Blockchain Important

Here are some features of this technology that makes it important to every business, industry, and sector:

#### **Enhanced security**

Information is delicate and important, and blockchain can considerably improve how your vital information is valued. By developing a record that can't be modified and is encrypted end-to-end, blockchain helps to prevent corruption and unauthorized actions. Privacy issues can

also be handled on blockchain by anonymizing private data and using authorizations to prohibit access. Information is classified across a network of computers instead of a single server, making it harder for hackers to steal data.

#### **Greater transparency**

Devoid of blockchain, every organization has to maintain a separate database. Because blockchain uses a distributed ledger, transactions and data are documented identically on various sites. All network participants with authorized permits see the same information simultaneously, delivering complete transparency. This allows members to see the entire transaction record and virtually eradicate any opportunity for fraud.

# Timely traceability

Blockchain creates an audit trail that records a property's provenance at every step on its path. In industries where consumers are worried about environmental or human rights issues encompassing a product, this helps provide the proof. With blockchain, it is probable to supply data about provenance instantly to customers. Traceability of data can also reveal weaknesses in any supply chain.

### Increased efficiency and speed

Traditional paper-heavy processes are time-consuming, liable to human mistakes, and often employ third-party mediation. By simplifying these strategies with blockchain, transactions can be conducted sooner than usual and more efficiently. Documentation and transaction components can be preserved on the blockchain, discontinuing the need to swap papers. There's no need to harmonize multiple ledgers, so clearing and payment can be much quicker.

# Automation

Smart deals can automate transactions, improving efficiency and speed up the process even further. Once pre-specified requirements are met, the next phase in the trade or process is automatically activated. Smart contracts lessen human intervention and dependence on third parties to validate that the terms of a contract have been fulfilled.

# - Chapter 6 -How You Can Benefit From Blockchain RIGHT NOW!

#### - Chapter 6 -How You Can Benefit From Blockchain RIGHT NOW!

Launched in 2011, blockchain, a virtual digital ledger, has drastically changed how financial transactions and data storage occur. Blockchains are best known for their vital role in cryptocurrency systems, such as bolstering a decentralized document of transactions.

To many people, the blockchain is beyond the reach of the common man and is only available to developers and crypto experts. The average person rarely knows how this important technology can impact their lives and how they can benefit from it. To most, blockchain is just a platform for trading virtual digital assets.

They have no idea of how much more this increasingly popular technology offers and how they can benefit from it in real-time.

This section explains three major ways to benefit from blockchain in real-time.

- 1. By investing in blockchain index funds.
- 2. By exploring blockchain programming and development
- 3. By investing in blockchain tokens

Investing In Blockchain Index Funds

Investing in index funds is one of the significant ways to benefit from blockchain. Index funds are inexpensive, easy, and safe to invest in as they generate good returns. Index funds are a great investment opportunity for anyone, and with the growing popularity of blockchain, they will continue to be a great investment choice.

# What Are Blockchain Index Funds

A blockchain index fund is a financial product developed to offer investors entrance into various baskets of digital currency investments. An index fund is a venture that's structured as an exchange-traded fund (ETF) or joint fund. A sole interest carries a broad combination of investments in one

"package." The fund administrators purchase each stock included in the index in the same percentage. The idea is to have an investment product that individuals can buy directly to get the same performance as the index without buying hundreds of individual stocks.

Blockchain Index Funds are ETFs that invest in a basket of companies that use blockchain technology for operations. The main thesis of blockchain exchange-traded funds is that blockchain technology enables companies that use it to cut costs and simplify their operations through decentralization.

Blockchain ETFs are thematic exchange-traded funds that control the stocks of organizations that employ blockchain technology. They tend to capitalize on a broader combination of investments than a Bitcoin ETFs or crypto ETFs, emphasizing more than just tracking the price of particular cryptocurrencies.

While cryptocurrencies like Bitcoin and Ethereum are popularly used for blockchain today, the technology gives the capacity to attend to a very broad range of applications that run well beyond crypto.

Most index funds invest in stocks or bonds. Examples of some popular index funds are:

Vanguard S&P 500 Index Fund (VOO) holds shares in each of the 500 largest companies in the U.S. It's designed to track the S&P 500 stock market index.

Fidelity U.S. Bond Index Fund (FXNAX) holds a diversified basket of U.S. government bonds and U.S. corporate bonds. It's designed to track the Bloomberg Barclays U.S products.

The blockchain ETFs on our catalog invest in dozens or even hundreds of stocks, empowering wealth diversification in an available fund. Given how quickly the blockchain capacity is developing, deciding on a blockchain

#### - Chapter 6 -How You Can Benefit From Blockchain RIGHT NOW!

ETF for your portfolio could be a reasonable choice for capitalizing on the industry.

# Benefits Of Blockchain Index Funds

There is little skepticism that digital coins have seen incredible development. Spurred on by the enormous growth of Bitcoin (BTC) and ether (ETH), the field of cryptocurrencies has only continued to develop. In extension to initial coin offerings (ICOs), several recent categories of blockchain investment commodities are now transitioning from decentralized finance to non-fungible tokens.

Blockchain technology has been applauded as a conceivable game-changer for many industries, from shipping and supply chains to banking and healthcare. By removing mediators and trusted actors from computer networks, dispensed ledgers can facilitate new sectors of economic activity that were not workable before.

Blockchain Index funds are a tremendous way to invest. They are affordable and accessible, it is simple to capitalize on them, and they generally yield strong returns. Evaluating the privileges that index funds give, cryptocurrency index funds are an intriguing investment alternative. Blockchain ETFs have a much larger commission than Bitcoin or other cryptocurrency ETFs. This is because blockchain technology can be utilized in numerous industries beyond finance. For instance, it is being used in the supply chain industry to trace the inception of a product and its activity across sophisticated supply chains involving multiple terrains and regulatory administrations. As blockchain's applications across industries thrive, analysts have hooked onto it as a substantial competitive differentiating component. The technology's fanatics assert that it lessens prevalent transaction expenses and decentralizes the ecosystem of an industry.

Another popular reason to invest in cryptocurrency is the craving for a reliable, long-term store of value. Unlike fiat money, most cryptocurrencies have a limited stock, crowned by mathematical algorithms. This renders it hard for any political body or government agency to permeate its value through inflation. This characteristic makes cryptocurrency desirable to people who are nervous about hyperinflationary circumstances, bank blunders, or other disaster scenarios.

# Explore Blockchain Programming And Development

In 2022, the demand for blockchain programmers and developers is skyrocketing. This is one of the biggest ways anyone interested in technology can benefit from blockchain. With the blockchain poised to revolutionize online transactions and the handling of data, the demand for blockchain developers and programmers is not going to shrink in the foreseeable future.

A career in blockchain programming has the potential for astronomical growth featuring a technology that is just getting started and hasn't yet reached its peak.

The million-dollar question here is, what does a blockchain developer do? In simple terms, a blockchain developer develops blockchain. To give a more in-depth answer, we need to establish that there are two different types of blockchain developers. These include the core blockchain developers and the blockchain software developers.

The core blockchain developers design the security and the fundamentals of the proposed blockchain network. Without the core blockchain, there would practically be no blockchain network. They lay the foundations for others to build on.

Blockchain software developers are the developers that use the core web architecture designed by the core blockchain developers to create

#### - Chapter 6 -How You Can Benefit From Blockchain RIGHT NOW!

decentralized apps and web varieties for the system. Note that, in a small network or business setting, the same person can fulfill both roles.

The major duties of a block developer are:

- Design blockchain security and core web architecture
- Developing the blockchain's backend and front end designs according to blockchain protocols and the client's specification
- Developing and monitoring smart contracts

# Invest In Blockchain Tokens

Another great way to benefit from blockchain is to invest in Blockchain Tokens. Blockchain tokens are virtual currency tokens that represent a tradable asset. There are wide varieties of tokens that you can invest in and get great returns on your investment. A few of them are explained below:

# ETHEREUM (ETH TOKEN)

Ethereum is a decentralized blockchain program that creates a peer-to-peer system that securely implements and verifies application code, called smart contracts. Smart contracts authorize participants to trade with each other without a third party.

Trade records are unchangeable, checkable, and securely administered across the network, giving parties entire license and transparent sight into the data. Transactions are sent from and accepted by user-created Ethereum accounts. A sender must approve transactions and spend Ether, Ethereum's native cryptocurrency, as a price for conducting transactions on the network.

Ethereum offers an extremely flexible platform on which to build decentralized applications using the native Solidity scripting language and Ethereum Virtual Machine. Decentralized application developers who

deploy smart contracts on Ethereum benefit from the rich ecosystem of developer tools and establish best practices that have come with the maturity of the protocol.

This maturity extends into the quality of user experience for the average user of Ethereum applications, with wallets like MetaMask, Argent, Rainbow, and more offering simple interfaces through which to interact with the Ethereum blockchain and smart contracts.

Ethereum's large user base encourages developers to deploy their applications on the network, which further reinforces Ethereum as the primary home for decentralized applications like Defi and NFTs. In the future, the backward-compatible Ethereum 2.0 protocol, currently under development, will provide a more scalable network on which to build decentralized applications that require higher transactions throughout.

# AVALANCHE BLOCKCHAIN (AVAX)

Avalanche is a blockchain that pledges to integrate scaling potentials and timely authorization times through its Avalanche Consensus Protocol. It can process 4,500 TPS (transactions per second). For Ethereum, that number is 14 TPS.

Avalanche's growing Defi ecosystem comprises some of the policies from Ethereum, such as the lending protocol Aave and the decentralized exchange protocol SushiSwap.

Avalanche isn't only for Defi, though. Ava Labs financially supports metaverse investments in the system too, with the impression being that a quick and inexpensive network could effortlessly support blockchain in games and virtual worlds.

Avalanche is constructed across three chains: The C-chain. The X-chain.

#### - Chapter 6 -How You Can Benefit From Blockchain RIGHT NOW!

The P-chain.

They stand for contract, exchange, and platform. The C-chain hosts Avalanche's Defi ecosystem, which is where most users perform a bulk of their trades. The C-chain is powered by the Snowman Protocol, a particular application of the Avalanche Consensus Protocol. The X-chain is for sending/receiving transfers and the P-Chain is for Staking and Validators (validate transactions).

# BINANCE BLOCKCHAIN (BNB)

Binance Coin is the cryptocurrency put out by the Binance exchange and it trades with the BNB symbol. As of Q2 2022, Binance Exchange is the most significant cryptocurrency exchange in the world, with a volume of \$7.6 billion.

Binance coin originally ran on the Ethereum blockchain with ERC 20 standard but has since evolved into the native coin of the Binance chain. It was inaugurated during an initial coin offering (ICO) in July 2017 and had a strict maximum of 200 million BNB tokens. It offered 10%, or 20 million, BNB tokens to angel investors, 40%, or 80 million, tokens to the founding team, and the remaining 50%, or 100 million, to the various participants through the ICO process.

Binance was created as a utility token for discounted trading fees in 2017. But since then, its uses have expanded to numerous applications on a wide number of platforms. It is used to pay for transaction fees on Binance.com, Binance DEX, and Binance Chain.

It can also be used for payments (at places like Crypto.com, Monetha, and HTC); to book travel accommodations (at sites such as TravelbyBit, Trip.io, and Travala.com); for entertainment purposes (virtual gifts, card packs, lotteries); to pay for online services (BitTorrent, Canva, Storm); and even for financial purposes (take out a loan at ETHLend or make investments at Moeda).

One can also use Binance coins to invest in certain ICOs that are listed through Binance's Launchpad program. New cryptocurrencies list on the Binance exchange, and the use of Binance provides a seamless marketplace for trading a variety of established and new virtual tokens.

The crypto token has garnered support from other partnerships which has helped its usage spread. It includes a partnership with Asia's premier high-end live video streaming platform, Uplive, which sells virtual gifts for BNB tokens to Uplive's 20 million-strong user base.

# POLYGON BLOCKCHAIN (MATIC)

Polygon is a "layer two" or "sidechain" scaling solution that runs alongside the Ethereum blockchain — allowing for speedy transactions and low fees. MATIC is the system's native cryptocurrency, utilized for payments, staking, etc. You can trade MATIC via exchanges like Coinbase. To utilize it, one can "bridge" some of one's cryptos over to Polygon and then interact with a large extent of prominent crypto apps that were formerly restricted to the basic Ethereum blockchain.

# Career Opportunities In Blockchain Technology

# Blockchain Developer

As previously discussed, the demand for blockchain developers is increasing daily—blockchain developers aid companies in exploring Blockchain programs that are in high demand. Blockchain development is a highly viable business direction today because people are anxious to attain all the advantages inherent to the technology. Generally, people in blockchain development have a lot of knowledge working with C++, Python, and Javascript before becoming Blockchain developers.

#### - Chapter 6 -How You Can Benefit From Blockchain RIGHT NOW!

# **Blockchain Solution Architect**

The Blockchain Solution Architect is responsible for modeling, authorizing, and assembling Blockchain solution elements with a team of experts such as developers, network administrators, UX designers, and IT operations whose job is to formulate and achieve the Blockchain solutions.

# Blockchain Project Manager

This person is assigned the task of engaging Blockchain projects with specialists whose duty is to create Blockchain solutions. They must hone and master their technical understanding to interpret the technology entirely. Another crucial skill is outstanding communication skills.

# Blockchain UX Designer

With the incorporation of blockchain into several businesses, its design, as well as its user interface, is becoming vital. The function of a Blockchain designer is to create a user interface that establishes trust and is appealing to an ordinary user.

These people need to be able to scrutinize every detail and have an artistic touch. They must also be hardworking as their chain of work expects them to spend numerous hours behind their computers.

# Blockchain Quality Engineer

In any development setting, there is a quality assurance engineer who checks and ensures that all project areas are of a certain standard. In the Blockchain world, a Blockchain engineer plays a similar role by ensuring that all procedures are of value in the Blockchain development setting. In essence, they execute the testing and automation of frameworks for blockchain.

These individuals require a watchful eye for every component that is involved because an insignificant error on their part impacts everyone adopting their technology. Exceptional communication abilities also goes a long way in this role such as effectively communicating to all members of a team about problems, successes, and paths forward is important.

# Blockchain Legal Consultant

As companies try to grasp the adoption of blockchain into their systems, legal matters always ensue. As companies install this modern technology, they are also watching for minute details regarding the law on what deliberations to formulate while investing. They are inquisitive about the implications of their actions, how to deal with their finances, and how to organize their identity.

For such a person, ethical communication skills are crucial. The person must also have a reasonable understanding of international law as blockchain is tech without boundaries. The legal minutia is not something for the faint of the heart, or someone lacking in boldness. Knowing how to effectively communicate in other languages positions someone to be as successful as possible in a role such as this considering the far reach Blockchain has on the world.

# Other Connected Roles and Career Prospects

- Accountants
- Public Relations
- Marketers
- Crypto journalists
- Managers
- Crypto brokers
- Analysts
- ICO advisors

# - Chapter 7 - What Is The Metaverse?

#### - Chapter 7 -What Is The Metaverse?

The metaverse is a web of digital realms, where each person acquires, sells, buys, and trades. This is where the blockchain enters into play, a system where thousands of innovators can build all sorts of applications. Users merely require one identity, a wallet. This wallet enables them to interact with various virtual worlds, games, applications, and services.

The fundamental vision of the metaverse is a virtual universe filled with several worlds where users can wander, contribute and partake freely. The metaverse is friendly, interoperable, affiliated, and available to everyone.

The metaverse is more than blockchain or any other technology. It is a virtual galaxy in which everyone can talk and relate with other people, while data, information, and value can be shared without permission. At the same time, realizing that one virtual world can never amount to a metaverse is vital because we are discussing the interconnection of numerous planets, if not all at once.

# Rules of the metaverse

In the metaverse, there are no limitations and no prejudice for any reason. This universe is steady and available to everyone. Everyone can relate to the metaverse in several manners, using a computer, virtual reality glasses or their smartphone.

For instance, if you assess the individual operations of the metaverse, their economies are interconnected, and participants can effortlessly enter it with the same identifier, personality, or avatar.

The metaverse opens up tremendous prospects for all. Artists aren't required to live in London, Milan, or Paris to make it into the big leagues.

88

Tech organizations no longer rely on Silicon Valley, and music entertainers no longer need to make physical trips to earn a buck. Everyone will be eligible to develop their digital goods and services and auction them to anyone around the globe. In this manner, every skill can be rewarded in its liberty.

Numerous big trademarks have already made their early strides into the metaverse. Big fashion names have sold digital assets that buyers can reclaim for real products, such as Nike, which is also trudging into metaverse fashion. Companies like Samsung, Ray-Ban, Pepsi Co, and Mcdonald's have realized the metaverse's colossal capability.

# **Metaverse Identities**

In the metaverse, you can have many identities at once, which you can invent for just about any reasons. You can acquire precious commodities or become a soccer player for a famous soccer club. You can build each of your personalities for distinct objectives. There are entirely no constraints.

In the metaverse, each individual will have their digital avatar, which is a customizable digital "look-alike." Interacting with the metaverse is typically done through enhanced and digital reality, but we will be eligible to interact with some fractions of this universe even in our real domain.

With the metaverse, we will all be qualified to access the knowledge we need when and where It is required, not just through the internet. The fate of the internet could potentially no longer rely on Internet Service Providers (ISPs) but the interconnectivity between all its players.

#### - Chapter 7 -What Is The Metaverse?

# How Does The Metaverse Work With Blockchain Technology?

The metaverse is a three-dimensional virtual existence space where people can interact with digital designs and with each other in an immersive environment. The metaverse is constant, real-time, never-ending, self-sustaining, interoperable, and decentralized.

It is straightforward to comprehend how cryptocurrency could fit into the metaverse concept. Crypto is untethered in some capacity from real-world fiat currency. This makes it a suitable model for income and transactions in the virtual realm.

Also, the metaverse is decentralized. No sole entity should or can influence the metaverse – decentralizing its assets would go a lengthy way in holding onto this philosophy.

In the metaverse, our surroundings, natural environments, people's images, objects, and so on, will only be limited by the developer's imagination and ongoing customization.

# **Blockchain Uses In The Metaverse**

Loads of applications of blockchain in the metaverse can be broken down into the following uses:

# Immutable in-game assets

In-game assets would become non-fungible tokens (NFTs) that you can trade with. VR gameplay would then allow users to make actual money that has use within the metaverse.

Investments would stay entirely intact even if the user terminates the game, the game was canceled, or there is an unfavorable incident in the metaverse.

# Self-identity authentication

As users steer the metaverse and their identity unfolds, blockchain technology can keep track – virtually working as the equal of a social security number.

Age, alteration to one's image, online activity record, and additional unique features can be stocked on the blockchain for transparency and to curb corruption in the metaverse.

# Real estate in the metaverse

Like in-game assets, real estate is another pivotal entity in the metaverse. Distinguishing and governing real estate can be a challenge, provided that the metaverse is limitless both in terms of space and concurrent users.

Blockchain could function as a steadfast record of how real estate is built, altered, traded, and eliminated in the metaverse.

#### - Chapter 7 -What Is The Metaverse?

# **Popular Metaverse Application And Platform**

# The Sandbox

The third-largest metaverse based on the Ethereum blockchain is the Sandbox. It authorizes users to build, share, and monetize their investments and gaming knowledge. People can acquire properties, influence, form, and own their properties and in-game investments in the virtual realm. Besides, they can trade such investments and gain real-world money in exchange.

Together with the blockchain, The Sandbox leverages the capability of non-fungible tokens (NFTs) to enable people to participate in the virtual world. The NFTs loan the users' qualities like scarcity, insurance, and authenticity.

While The Sandbox is far from the only metaverse contribution, it is distinct in its breadth of the commodity portfolio. It includes three products that deliver an extensive adventure to gamers:

# VoxEdit:

It enables users to develop and animate 3D objects. These objects are called assets and use the ERC-1155 token standard. This characteristic allows the minting of both fungible and non-fungible objects with a single, smart contract. While non-fungible tokens are separable and distinct, fungible objects are not distinctive and can be traded for another asset.

# The Sandbox Game Market and Marketplace:

The market allows users to create 3D games for free, while the marketplace allows users to trade their items and possessions.

# Roblox

Roblox is an interactive global game where you can generate occurrences and play within them as an avatar of your preference. It's a world where you can decide to be or do anything you like. This freedom makes Roblox a, less refined, but still apt illustration of what the metaverse might look like. It's regarded as the Roblox Metaverse as such.

Companies like Meta (formerly Facebook), Epic Games, and Microsoft are all striving toward this new sensational technology. We will see the slow advancement over many years before the metaverse is in everyone's home.

A lot of role-playing games (RPGs) that are immersive need headsets or, at least, computers to access – not Roblox. The developers rendered it accessible on all phones so people can engage themselves in the game anywhere at any time.

Roblox doesn't just enable you to play. It will help you to develop. You can design and develop whatever you can think of, from sophisticated fighting games to just cooling off in your virtual living room.

#### - Chapter 7 -What Is The Metaverse?

# Decentraland

Decentraland is an Ethereum-based three-dimensional virtual setting, essentially a Metaverse where you can buy or sell lands/plots. As the name implies, DECENTRALAND comprises two phrases, decentral and land. Then, as per your provision, you use the land to build your settings and applications or even a marketplace. It prevails as the first-ever completely decentralized virtual space that enables people to submerge themselves within this technology. It is a complete platform that entitles users to build, exchange, and monetize their digital capacity and virtual real estate investment. You can acquire anything and everything on Decentraland, ranging from an art gallery to hangout spots. These virtual properties can be obtained as Non-Fungible Tokens using the MANA cryptocurrency. The tokens you can use in Decentraland are MANA, Estate, and LAND.

The users are expected to own MANA tokens in their Ethereum wallet to make use of and interact with the ecosystem of the application. The software of this application uses the Ethereum blockchain technology to keep track of the ownership of the digital LAND on this platform.

# **Career Opportunities In Metaverse**

# **Metaverse Research Scientist**

An important percentage of the work around designing the metaverse right now is concentrated on research. As the impression of the metaverse

94

becomes widely acknowledged all over the world, the function of a metaverse exploration scientist would certainly become a crucial one. The duty of metaverse research scientists would give insights into apparent and digitally actionable worlds. Essentially, one should cultivate the capabilities for the formation of and scaling prototypes by employing various metaverse technologies.

# **Ecosystem Developer**

The metaverse can not thrive on its own. Creating a virtual world like the metaverse requires many components in a large ecosystem, all of them interconnected with each other. Even if one has the hardware and software expected for developing the metaverse, there is something more you need for assembling the massive virtual interconnected spaces.

The career opportunities in the metaverse for ecosystem developers are apparent in programs for full-fledged metaverse development. Ecosystem development requires coordination between stakeholders and users for securing the feasibility of all functionalities on the platform. In extension, the ecosystem developers take care of ensuring interoperability in all experiences on the metaverse.

# Metaverse Hardware Builder

Another central role among metaverse jobs is that of a metaverse hardware creator. Hardware is a crucial prerequisite for creating immersive digital worlds which coincide with the physical world. The metaverse hardware builder has to take care of compiling the necessary hardware for enabling the digital experiences of the metaverse. Furthermore, the hardware

95

#### - Chapter 7 -What Is The Metaverse?

builders must have needed skills for adapting the hardware to ongoing developments in the metaverse.

# **Metaverse Cyber Security**

One can recognize how the metaverse is a susceptible target for fraud, cyber-attacks, and many other unforeseen impacts. Therefore, cyber security experts can find alternatives for career advancement in the metaverse. The duties of the metaverse cyber security experts would largely emphasize blocking threats in real-time. They also have to identify the security risks and answer reconsideration and amendment statutes and protocols.

# **Metaverse Planner**

One can also discover opportunities in metaverse careers with roles like that of a metaverse planner. Implementation of suggestions is reasonably hard. After creating a working metaverse, firms would look for integration of all functionalities in a completely virtual realm. At the same time, industries need to discover the exact things for the continuously expanding digital world. Metaverse planners have to fuel a strategic portfolio of chances by envisioning the all-around structure of a metaverse. The metaverse planner would operate as the propelling force for the adoption of metaverse as they establish the functionalities within it.

# **Companies Leading The Metaverse Development**

# 1. Hyperlink InfoSystem

Hyperlink InfoSystem is considered one of the world's top IT & Software development companies. The corporation is known for its mastery of web and app development wielding the latest technologies and tools. With the surge in desire for Metaverse solutions, Hyperlink InfoSystem operated on several projects and built multiple solutions for their clients based on their requirements. It has more than 650 highly skilled resources who are ever willing and prepared to make solutions using the latest technologies that get maximum ROI for clients and per client conditions.

# 2. Decentraland

Decentraland is a decentralized platform delivering a Metaverse experience to every business. Decentraland is creating a suite of supporting devices and applications that can enable people to create three-dimensional content, games, applications, and so on. Decentraland delivers all the services, including virtual reality, app development, game design, cryptocurrencies, and 3D art.

# 3. Unity

Unity platform gives a comprehensive set of Metaverse software solutions to create, run and monetize interactive, real-time 2D and 3D content for various digital devices, including mobile phones, tablets, PCs, consoles,

#### - Chapter 7 -What Is The Metaverse?

and so on. Unity has a skill pool of 1,800+ person research and development team that keeps up with the forefront of advancement.

# 4. Andersen

Andersen has more than 2700 developers, QA engineers, business analysts, and supplementary software development professionals giving digital evaluation services, including web development, app development, cloud development, data science including Metaverse development services. Andersen provides top-notch results for various industries, including financial, logistics, healthcare, and many more.

# 5. Deloitte

Deloitte assists clients to recognize and capitalize on the next massive wave disrupting business and society using next-generation strategies, tools, and technologies to create and connect virtual worlds for the industrial, workplace, enterprise, and consumer contexts.

# - Chapter 8 -Why You Need To Learn About The Metaverse RIGHT NOW!

#### - Chapter 8 -Why You Need To Learn About The Metaverse RIGHT NOW!

The Metaverse is growing at an exponential rate and will eventually take over the digital world. It improves revenue for businesses and gives a fascinating user experience. The Internet is also evolving to be better with the Metaverse. And this transition will change many aspects of our lives.

In 1992, Neal Stephenson coined the term Metaverse out of "meta" and "universe" in his science fiction novel. He visualized lifelike avatars who interacted in a virtual world. In 2022, the Metaverse is a reality .

Many people do not understand the concept of the Metaverse and its many benefits. The Metaverse does not mean a new fancy kind of technology or digital tool. It is a transition in technology that improves human interaction using virtual reality. The opportunities that come with better communication are endless. In recent times, many brands have started to invest seriously in the Metaverse to improve revenue.

# Why The Metaverse Is Important

Globally, about <u>1 billion people use active augmented reality (AR)</u>, and in a few years, the number of users is likely to increase. <u>More than 50% of major influencers</u> are partaking in the Metaverse experience. This will aid to enhance awareness and increase AR users. As a result, marketers can engage more audiences and improve business strategies.

Let's explore some of the important uses of the Metaverse:

1. Fascinating Immersive Experience

The Metaverse is an innovation that improves users' experience, social networking, and communication. With the Metaverse, social media will improve from the current 2D interface to a real-time 3D experience. This

enhances communication and socialization because the Metaverse resembles the actual world.

Users can manipulate the Metaverse for self-expression. This includes other lifestyle activities like gaming, exercising, watching movies, and more.

Business owners can carry out virtual meetings efficiently and reach a target audience. This improvement opens the door for many other business opportunities.

2. Nullifying Physical Distance and Connecting People

The Metaverse creates a virtual world that acts as a meeting space for users to converse and engage. It eliminates geographical barriers and brings people closer than ever. Physical location becomes irrelevant in the virtual world and no longer acts as an impediment to meetings. With the growing popularity of video-based meetings, the Metaverse seems to be a natural evolution of interfaces such as Zoom, Microsoft Teams, Slack, and so on. Weaving in the excitement of new technology within the business sector will allow companies to make their meetings more connected, fun, and participatory.

As a result, it becomes easier to find and connect with people and businesses from the safety of your home. It also becomes more comfortable making new acquaintances and building genuine relationships.

3. Providing Ways to Improve Business

With geographic barriers gone, businesses can develop better strategies to reach more customers and increase income. The Metaverse has paved the way for a better form of marketing and this can serve as the foundation for

#### - Chapter 8 -Why You Need To Learn About The Metaverse RIGHT NOW!

business innovation. So, businesses get more opportunities and become more productive.

One of these many opportunities is the effective promotion of products and services. The Metaverse gives a new immersive outlook that boosts the consumer experience. Inventions like virtual stores can help to nurture prospects to buy products online.

# 4. Enhanced Gaming Experience

Gaming is one aspect of entertainment that will probably benefit the most from the Metaverse. New trends in technology have improved the gaming experience. The invention of the Metaverse makes this even better.

AR/VR technology enhances the features of players and gives the gamer an extraordinarily unique and immersive experience. Game companies are investing in this technology to improve the gaming experience of their users in the Metaverse.

# 5. Provides Opportunities for Investment

The invention of the Metaverse offers the opportunities for users to invest and earn extra income. The virtual economy has been developed and users can build sustainable businesses to earn revenue. This provides opportunities for better investments and cash flow.

For instance, users can invest in acquiring digital assets. Some users can establish virtual storefronts to sell digital products. While others can buy plots of virtual land in the Metaverse as digital assets. Some develop various skills using the Metaverse, while others play Metaverse games to get tokens they can exchange for money. As crypto trading becomes improved, traders can invest better while in the Metaverse.

# 6. Helps to Build Teamwork

If you're a business owner, you can use the Metaverse to build team collaboration and cooperation among your staff. There's easy communication and flow of essential information at any time.

Business meetings, conferences, and seminars can be held efficiently in the Metaverse. As a result, your business becomes more efficient as workers are more productive.

# 7. Remarkable Advances in Online Learning

Since the start of the internet, the flow of accessible information has increased. This improves online learning and education. With immersive and virtual experiences, the Metaverse makes online learning even more fascinating.

The Metaverse creates a virtual learning environment in which people can access information. Resource and study materials can also be obtained. Communication and learning become fun and enjoyable. With the Metaverse, people can gain an edge through actual practice instead of consuming theoretical information.

# **Business Applications of The Metaverse**

The Metaverse can be used as a tool to enhance the productivity and profitability of many businesses. But not all brands can enjoy using this innovation. If you envision the Metaverse as a helpful tool for your business, there are factors you should consider:

#### - Chapter 8 -Why You Need To Learn About The Metaverse RIGHT NOW!

- Determine where your business stands in the digital space.
- Evaluate risks and possible losses. Determine how to manage risks.
- Evaluate the possibility of increasing business income.
- Decide if the cost of investing in the Metaverse is worth it.
- Determine if the target audience can be found in the Metaverse and how much time they spend exploring the Metaverse space.
- Assess the feasibility of the Metaverse in generating leads and improving sales.

Nevertheless, there are aspects of business that the Metaverse can be applied. These include:

#### 1. E-commerce

E-commerce enjoys many benefits when it enters the Metaverse. The Metaverse provides an excellent platform for improving e-commerce with 3D digital and AR technology. The Metaverse can help to enhance customer experience and subsequently boost sales.

Many digital goods can also be produced and marketed on the Metaverse. Virtual showrooms and stores can be established to sell and showcase products. This provides the opportunity for users to meet face to face with vendors in a virtual world.

#### 2. Sales/Marketing

Sales and marketing is the fundamental aim of businesses. With the Metaverse, business owners can reach target audiences with well-crafted marketing strategies. This helps to increase lead generation and conversion, boost sales and increase revenue.

Also, you can easily connect and communicate with clients in a virtual world. Unlike social media, the Metaverse helps to better assure customers.

## 3. Business Productivity and Communication

Currently, almost all businesses communicate with 2D social networks like Zoom and Google Meet. But this can be more efficient. In the Metaverse, business meetings are carried out in a real-time 3D virtual world. Here, every participant is represented by life-like avatars or holograms.

## 4. Defi Market (Cryptocurrencies and NFTs)

Modern technology and digital space have advanced with the invention of decentralized finance (DeFi). The Metaverse helps to usher in this innovation by working in conjunction with it. This implies that digital products offered in the Metaverse will need to be purchased with digital currency.

Through blockchain technology, cryptocurrency and NFTs will provide financial security, transparency, decentralization, and better fiscal management. With cryptocurrencies, transactions become quicker, easier, and without hassle, while NFTs serve as tokens that holders use to claim digital assets. NFTs are important because they help Metaverse users buy, sell and control their digital assets. They also enable users to move their assets from the physical world to the Metaverse and vice versa.

## How To Make Money From The Metaverse

Besides business owners, individuals can also make money from the Metaverse. There are various ways to earn from the digital space, some of these include:

1. Earn Crypto Rewards with Play-to-Earn Games

Gaming in the Metaverse is an intriguing experience and a source to earn money. Metaverse users can earn cryptocurrency rewards with play-to-earn games. The more games you play, the more rewards you get and you can exchange these rewards for real money.

2. Become An NFT Artist/Illustrator

NFTs have become the new digital gold. In the Metaverse, NFTs are one of the important tools used to own assets such as virtual land and properties.

As an innovation, there is a need for illustrators and artists to create valuable NFTs. You can design NFT collections and sell them on the Metaverse. You can work as a freelance artist or even get employed in tech companies.

You can also use NFTs to earn income as a digital real estate dealer by linking buyers to sellers of digital buildings. You can also sell avatar clothing (wearables) in virtual stores on the Metaverse.

#### 3. Build And Sell VR Games

Since many gamers spend time in the Metaverse, it will be lucrative to build, design, and sell VR games. You can also design 3D accessories which gamers use to play games. Platforms like Roblox and Unity Software are good places to sell your games or accessories and earn money.

#### 4. Organize Live Metaverse Shows

As a Metaverse user, you can organize Metaverse shows and sell tickets to participants who attend virtually. This is becoming popular as users can attend any show in the comfort of their homes.

Shows can be organized in virtual concert halls. While performers are represented by holograms or avatars.

#### 5. Metaverse Architecture and Designer

If you're good in architecture and design, then you can create a niche for yourself in the Metaverse. Many brands are investing heavily in the digital space. Also, the need for architects to create building models is increasing. You can also earn income by selling your designs in the Metaverse as NFTs.

## **Top Businesses Entering The Metaverse Space**

#### 1. Meta

Meta is the parent company of Facebook, Instagram, and WhatsApp social media platforms. Meta aims to enhance the user experience by creating a virtual "universe", a conglomeration of real-time 3D virtual worlds.

Billions of dollars have been invested to acquire AR technology to kick off these plans. Thousands of employees have also been employed to increase productivity. Meta also plans to develop a Metaverse power source—which is a highly efficient supercomputer. They expect to see results of their efforts within a 15-year range.

#### 2. NVIDIA

NVIDIA is a fast-growing company that is dedicated to developing the Metaverse space. They provide a platform that artists, illustrators, designers, and content creators utilize to develop 3D virtual products.

The company has invested in developing a program called the Omniverse. This program will aid to enhance the development of virtual designs and simulations. NVIDIA remains one of the best Metaverse companies to partner with.

## 3. Google

Some time ago, Google had the idea to make Google Glasses, glasses with built-in AR technology. These glasses aimed to provide an immersive experience for Google users. It was made to improve the daily activities of an individual.

But there were some legitimate concerns with the video recording features of the Google Glasses which may breach privacy and security.

Nevertheless, Google is working to eliminate these concerns, while investing in the Metaverse space.

#### 4. Epic Games

Epic Games is one of the top video game companies that is targeting to include Metaverse in its production. With the start of Web 3.0, Epic Games invested in the development of the Metaverse to improve user experience.

To further advance Metaverse game production, Epic Games has made investments. Epic Games has obtained story features like virtual worlds from Spire Animation Studios. This investment will lead to an improved immersive experience for gamers.

#### 5. Microsoft

Microsoft is one of the top tech giants that focuses on Metaverse development. Microsoft has recently acquired a gaming company, Activision Blizzard. This may mean that Microsoft intends to produce play-to-earn games for the Metaverse digital space.

Microsoft is working to develop a Qualcomm-equipped AR chipset to improve the Metaverse experience. They are also creating holoportation technology that improves an immersive experience.

## 6. Apple

Apple is one of the first tech companies that has developed Head-Mounted System (HMS) apps. These apps are used for virtual meetings and social interactions. Although it does not have its Metaverse yet, Apple plans to broaden its AR/VR innovations. Currently, Apple has released 14,000 ARkit

#### - Chapter 8 -Why You Need To Learn About The Metaverse RIGHT NOW!

apps on the Apple store. These apps focus on gaming, recreation, communication, and improved customer experience.

#### 7. Decentraland

Decentraland is a virtual reality platform that provides a marketplace for Metaverse users and businesses to buy virtual assets. Some of these assets include virtual land, buildings, NFTs, and more. It also provides opportunities for content creators and companies to advertise their products. As a result, they gain visibility in the Metaverse space. Users can earn crypto rewards or tokens while engaging in the Decentraland space.

#### 8. Roblox Corporation

Roblox Corporation is a video game enterprise that provides a platform for digital creators to form their digital communities. It also employs AR in its game production to give an immersive experience. Roblox invested in developing a Metaverse business model that improves human co-experience and interaction.

#### 9. Unity Software

Unity Software is one of the top game production companies that has made significant strides in Metaverse development. It provides a platform that offers real-time 3D software development for various businesses. Unity Software provides a platform for studios and developers to produce 2D and 3D video games for users.

## Why The Metaverse Is The Future

#### 1. The Metaverse is An Evident Evolution of The Internet

The internet has evolved from Web 2.0 to Web 3.0 in a small amount of time. The Metaverse is the pure depiction of this digital transition. In the future, the Metaverse could be the advanced social platform where people can interact, work, and trade.

#### 2. Prospects for Investment And Income

A virtual economy is an alternative form of the digital economy in the Metaverse. Due to the increase in the value of digital assets, many enterprises will invest and boost the economy. This provides opportunities for job creation, monetization, and increased cash flow.

#### 3. Improvement in Various Business Aspects

Businesses are what drive the economy. The Metaverse already helps boost aspects of business like marketing, advertising, and sales. Customer relationships and communication are also enhanced as social interaction becomes better.

#### 4. Metaverse is The Topic of Current Technological Advancements

Many big tech companies are taking decisive steps to improve global technological innovation. Recently, they have shown great interest in Metaverse development. As a result, they pave the way for small tech enterprises to explore the Metaverse

So far we have learned that the concept of the Metaverse is new and out of the ordinary. It is generally regarded as a complex network of virtual worlds in an alternate reality. It employs a vast combination of various forms of technologies. These include virtual reality, digital currencies, blockchain, machine learning, 3D graphics, and VR-enabled technology.

The Metaverse can be beneficial in many aspects of life and business – Ranging from improving social interaction and communication to being a source of substantial income. Right now, there are many ways through which you can benefit from the Metaverse.

The Metaverse is still evolving. Though it presents fascinating experiences and benefits, many people are skeptical about it.

The Metaverse will most likely be the future of the global digital space. In time to come, it may replace the current communication systems and technology.

## Join The Metaverse of Your Choice

As stated earlier, the Metaverse is still evolving. It may take a few more years before it is well-developed and fully utilized in the digital space. Top businesses are creating their Metaverses to improve customer experience. But the world lacks many requirements to support a seamless transition to the Metaverse.

Firstly, the world lacks technical infrastructure and online resources to support billions of Metaverse users. Also, there are rising concerns about a possible increase in data privacy, cybercrime and security. The Metaverse needs an uninterrupted 5g internet connection and edge computing as well as enough supply of power to perform functions seamlessly.

Despite all these drawbacks, the Metaverse can still be implanted and achieved with its integrity intact. This is due to the widespread support from big tech companies like Meta that are working to develop Metaverse technology. They aim to explore innovations to eliminate and manage Metaverse risks.

If you're thrilled with the idea of the Metaverse and wish to access it, here are some ways to join the train:

• Get on A Metaverse Platform

Many Metaverse platforms have developed in recent years. One of the most popular ones is Decentraland.

AS mentioned previously, in Decentraland, content creators and designers can showcase their digital products for sale. Buyers can also explore various virtual stores to get products. Other platforms like Sandbox are also good to begin your virtual journey.

• Use Virtual Reality Devices

To get on a Metaverse platform, you can use your laptop, Ipad, phone, or Macbook. But to get the entire Metaverse experience, you'd need to get a VR headset or augmented reality glasses. A good example is Meta's Oculus Quest 2 VR headset.

Your phone or laptop might not have sufficient processing power to support the complex virtual worlds in the Metaverse.

• Create Your Avatar

An avatar is simply the graphical representation of the user. In the Metaverse, avatars are made with a complex 3D graphic design to look realistic.

You can create an avatar and customize it however you wish. You can modify the facial features, body, and clothes (wearables) to any color or design. You can even include accessories to suit and personalize your avatar.

With your avatar, you can explore different virtual worlds and easily do business. If you decide to not create an avatar, however, many Metaverse platforms allow you to copy/use avatars that were previously made.

#### • Explore The Metaverse Space

The Metaverse blurs the lines between the physical and virtual worlds. There is a wide range of virtual places you can explore while in the Metaverse.

If you wish to buy virtual assets or products, there are virtual e-commerce platforms to visit. You can also check out virtual social spaces such as virtual shows and live virtual concerts. If you want to interact or have fun, you can join virtual events or play games.

#### • Playing Video Games

Video games are one of the best ways to get a view of what the Metaverse looks and feels like. Video games equipped with AR technology are designed to give the Metaverse experience.

Gamers can create avatars, buy wearables and live in a real-time virtual world. Big game companies like Epic Games are developing more "Metaverse focused" video games to give a more immersive experience for gamers.

• Metaverse Platforms You Can Explore

In recent years, many businesses have created various Metaverse platforms for users. To join any of them, simply head to their websites and navigate to get started.

While many are used for gaming, some can be used as virtual marketplaces, social platforms, and more.

#### 1. The Sandbox

As discussed previously, the Sandbox is a Metaverse gaming space that was initiated in 2012. It has many virtual environments for users to explore and play games. You can develop, display, and earn money from your games and gaming experience. The Sandbox offers many opportunities to explore and own digital assets.

The Sandbox utilizes the Ethereum blockchain to develop its cryptocurrency called SAND. This means that users will have to create a crypto wallet to find their SAND tokens.

## 2. Decentraland

Also mentioned previously, Decentraland has become one of the most popular Metaverse platforms. Although it was recently launched in 2020, Decentraland already has thousands of users. It allows digital creators to

develop, market, and sell their content. Users can also acquire, own and trade digital assets like virtual land, designs, NFTs, and more.

Decentraland is browser-based, allowing laptop and phone users to access its Metaverse space. It requires a crypto wallet used to fund its cryptocurrency called MANA. Decentraland is also based on the Ethereum blockchain. You can also purchase virtual land as NFTs on Decentraland.

#### 3. Axie Infinity Metaverse

Axie Infinity is a game-oriented Metaverse platform that was established in 2018. Users can explore virtual environments and acquire virtual assets like characters while gaming. Characters are called Axies which represent NFT tokens.

Axie Infinity has its token called SLP. But it also uses other Ethereum-based cryptocurrencies. Axie Infinity is accessible on Windows, Android, iOS, and Mac OS.

#### 4. Roblox

Roblox is one of the top gaming companies developing a Metaverse for its users. It was initiated in 2006 and has been developed to improve gamers' experience. Roblox aims to improve its virtual reality games and Metaverse.

Over the years, Roblox launched its Roblox Studio which opened doors for users to explore the Metaverse, create, and sell games. It also has virtual stores where digital products are marketed and sold. Users can trade using a non-crypto, virtual currency called Robux.

With the expansion of its Metaverse, Roblox acquired virtual land to host events and concerts. It is not associated with any cryptocurrency yet.

#### 5. Fortnite

Fortnite is an online gaming platform that is based on virtual reality. Launched in 2017, It was developed by Epic Games to boost the gaming experience.

Fortnite is expanding beyond gaming to hosting non-game virtual events. It is evolving to become a Metaverse social platform where users can interact and play games. Users can also explore different virtual worlds, and learn skills related to gaming.

## Invest In Metaverse Tokens

Investing in Metaverse tokens is one of the most lucrative ways to earn income from the Metaverse. Although, this is high-risk as tokens can be just as volatile as cryptocurrencies. <u>Bloomberg</u> states that, in 2024, the size of the Metaverse market may expand to more than \$500 billion. This is likely because businesses are investing and developing Metaverse projects at an increased rate. Below are some of the Metaverse tokens you should consider when investing.

## 1. MANA (Decentraland)

Decentraland is a blockchain-based virtual reality platform that has the largest virtual universe. MANA is an ERC-20 token used by users to buy virtual products in Decentraland.

MANA is based on the Ethereum blockchain. This makes it possible for it to be mined, bought, and sold for other cryptocurrencies. There is a fixed supply of 2.19 billion MANA tokens in Decentraland.

LAND is the non-fungible ERC-17 token that users buy using MANA. It is a unique virtual asset that users can own, buy, and sell as they wish. The invention of LAND expands the Decentraland marketplace and provides investment opportunities.

#### 2. Facebook Tokenized Stocks

Facebook tokenized stocks owned by Meta are shares that have been made into tokens. Unlike real stocks, Facebook tokenized stocks are more liquid and easy to trade. They're also easy to acquire as you can buy only a fraction of them if you choose.

Facebook tokenized stocks can be a lucrative investment. This is because Meta is persistent in their interest in the Metaverse. They have invested billions of dollars in establishing their Metaverse projects. Facebook tokenized stocks are available for purchase on FTX and Bittrex

## 3. SAND (The Sandbox)

The Sandbox token, SAND, is a popular Metaverse ERC-20 token based on the Ethereum blockchain. It is a utility token to perform virtual transactions on the Metaverse. Users can also use SAND as a governance token through which they can make decisions on game development.

In the Sandbox, there is a limited supply of 3 billion SAND tokens available for users.

4. Enjin Coin (ENJ)

Enjin (ENJ) is an online game platform that provides gaming tools like plugins, crypto wallets, and development kits. Gamers and developers can create and trade digital products with the Enjin platform.

The Enjin Coin is an Ethereum-based Metaverse token that users can own, buy and sell. ENJ is the native cryptocurrency of the Enjin platform. All NFTs minted are directly funded by the platform. But NFTs created in ENJ are made with a different ERC standard (ERC-1155). It does not follow the common standard (ERC-721). Even so, ENJ tokens have real-world value. This is because a specific amount of ENJ can be minted anytime an NFT is created.

## **Final Thoughts**

Whether you are just getting started or an avid participant, you will find that the worlds of blockchain, cryptocurrencies and the Metaverse are ever changing and expanding at light speed. We are embarking on a new era of the digital economy and the digital lifestyle. The road ahead will be bumpy, but those that are willing to invest their time, money and learn as much as possible, will be on the forefront of our new world, and reap the rewards.

I trust that you now have at least the beginning knowledge to not only survive, but thrive in this new world. Welcome to the future!