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Marketing Strategies to Increase Demand on Cryptocurrencies

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Abstract

Bitcoin is a form of digital cryptocurrency and Blockchain is a platform of trust. Bitcoin is a concept of decentralization and to adopt it as currency is one way of utilizing it as value. There are a lot of crypto currencies available worldwide. Some far more valuable than others such as; Bitcoin, Dogecoin, Litecoin, Ripple, Tron etc. And the global financial system is the worldwide framework of legal agreements, institutions, and both formal and informal economic actors that together facilitate international flows of financial capital for purposes of investment and trade financing. A country's decision to operate an open economy and globalize its financial capital carries monetary implications captured by the balance of payments. It also renders exposure to risks in international finance, such as political deterioration, regulatory changes, foreign exchange controls, and legal uncertainties for property rights and investments. This report agrees with the consensus that cryptocurrencies will gain mainstream status in the next 10 years. The genuinely innovative element seems to be the distributed ledger, especially in combination with digital currencies that are not tied to money denominated in any sovereign currency. The main innovation lies in the possibility of making peer-to-peer payments in a decentralized network in the absence of trust between the parties or in any other third party. Digital currencies and distributed are closely tied together in most schemes today, but this close integration is not strictly necessary, at least from a theoretical point of view.

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Introduction

Bitcoin, one of the first online currency has exploded in the market as enables the user to make payments anonymously, cheaply and securely through complex cryptography. Bitcoin and Blockchain are the brainchild of the 37 year old, Japanese international, Satoshi Nakamoto. Satoshi Nakamoto published a paper on metzdowd.com's cryptography mailing list about a peer-to-peer Electronic money payment system titled, "Bitcoin: A Peer-to-Peer Electronic Cash System." The foundation Bitcoin is known as Blockchain.

Just as the Internet began with the basic use instance of email and the intend to decentralize communications, so did Blockchain, in similar terms, began to decentralize 'value'. The first use of this case being cryptocurrencies like Bitcoin. The Internet encouraged online trading platforms, social networks, gaming, etc. Similarly, Blockchain has expanded its utilization cases, far from much discussed cryptocurrencies like Bitcoin and Litecoin to different cryptoassets, for example, cryptocommodities like Ethereum and cryptotokens like Steem. New products will proceed to develop and flourish different sections, for example, cryptosecurities. The descriptive nature of this research focuses on the advancement in technology called cryptocurrencies, crypto-assets, digital money and the innovative open ledger called blockchain.

Goal:

The goal of this research is to understand on how to increase demand for cryptocurrencies, to set correct marketing strategy for showcasing the features of the product, increase trust in it and understanding of all the benefits it has to offer.

Importance of this study:

There are over a 1500 cryptocurrencies in the market today and growing.

1. This research is important to new cryptocurrency startups and its present competition.
2. This research suggests the solutions to the problems faced by the crypto/blockchain platform.
3. This study can be used as a secondary research material for crypto startups.

Generally, money is expected to satisfy three major jobs: a store of value, a medium of exchange and a unit of account. In the event that Bitcoin or cryptocurrencies are to turn into the 'new cash' there are a few inquiries we have to address; is it mandatory for money to fulfill majority of the previously mentioned attributes? Has money and its perception evolved? Does money need to be 'tangible'? This master thesis analyses the market which the Bitcoin and other similar cryptocurrencies operate in, its relevance, economic relations and benefits and proposes methods to increase demand among consumers.

Research Methodology

The research process adopted for this study is Exploratory Research. The research process consists of:

1. Qualitative analysis such as:

- Content Analysis
- Interviews
- SWOT Analysis

2. Quantitative analysis such as:

- Surveys
- Comparative Analysis

Procedure of Data Collection

The research is conducted through two sources.

Primary Research: The primary source of data collection has been through two main surveys. This firsthand information was obtained through personal interviews with consumers and through questionnaires. Questionnaires were created using SurveyMonkey, a cloud-based survey software company.

Secondary Research: Secondary Research was conducted through various literature, websites and journals available and provided by the lecturers to me during the analysis.

Sampling: The sample design constructed for the purpose of this research, was simple and direct questions asked to random people across Tbilisi, Georgia. They were the main sampling units geographically and social media platforms like Facebook, Instagram were used to collect data individually. The survey was conducted among 100 participants.

Keywords: Bitcoin, Cryptocurrencies, BTC, Blockchain, Cryptoassets, FIAT, Digital currency

1. Money: It's Meaning for Economic Relations

Economic Meaning of Money

Money is a medium that we use to communicate value with each other which has economic consequences. We earn it and spend it but do not usually assume much concerning it. Economists outline money as any good that's broadly accepted as final payment for goods and services (Functions of Money - The Economic Lowdown Podcast Series, n.d.). In his book *Money and Mechanisms of Exchange* (Jevons, 1875), William Stanley Devons analyses money as having four functions. Which are Medium of exchange, Measure of value, Standard of value and Store of value where the most modern textbooks refer to money having only three main functions and money as a standard of value being subsumed in the others (Mankiw, 2007).

Evolution of Money

Let's take a look at the different forms of money throughout history:

- (I) Commodity Money
- (II) Metallic Money
- (III) Paper Money
- (IV) Credit Money
- (V) Plastic Money
- (VI) Digital Money
- I. Commodity Money

Since the early ages, any product that was commonly chosen and demanded by general consensus was utilized as money. Products like hides, skins, salt, rice, wheat, utensils, weapons and so on were regularly exchanged as money. Such system of goods for goods was known as 'Barter Exchange.'

II. Metallic Money

With the advance of human civilization, commodity money changed into metallic money. Metals like gold, silver, copper, and so forth were utilized as they could be effectively taken care of and their amount can be effectively determined. It was the primary form of money all through the significant bit of written history.

III. Paper Money

It became increasingly risky to transport gold and silver coins to and from places. The advent of paper money signaled a crucial stage in the development of money. Paper money is regulated and issued by Central bank of the nation (RBI in India). At present, a large amount of money comprises mostly of cash notes or paper money issued by the national bank.

IV. Credit Money

Development of credit money occurred practically side by side with paper money. Individuals keep a piece of their money as deposits with banks, which they can pull back whenever, wherever through checks. The check (known as credit money or bank money), itself, isn't money, yet it plays out indistinguishable capacities from money.

V. Plastic Money

This kind of money is plastic money as Credit cards and Debit cards. Their main purpose is to alleviate the public from the burden of carrying large amounts of cash around.

VI. Digital Money

Digital money isn't tangible like a dollar note or a coin. It is represented and exchanged utilizing computers and smartphones. The best and broadly utilized type of Digital money is the cryptocurrency Bitcoin. Digital money is traded utilizing technologies, for example, cell phones, credit cards, and online cryptocurrency exchanges.

Functions of Money

I. Money is a store of value

If I work these days and earn \$25, I will hold on to the sum before I spend it because it will hold its worth till tomorrow, next week, or maybe next year. In fact, holding money is a

more practical method of storing value than holding alternative things of value for example, corn, which could rot. Although it's an economical store of value, money isn't an ideal store of value. Inflation slowly erodes the buying power of money over time.

II. Money is a unit of account.

You can consider money as a yardstick—the device we tend to use to calculate value in economic transactions. If you're buying a brand-new laptop, the value may well be quoted in terms of t-shirts, bicycles, or corn. So, as an example, your new laptop may cost you a hundred to one hundred fifty bushels of corn at today's prices, however you'd find it most useful if the value were set in terms of cash because it is a standard measure of value across the economy.

III. Money is a medium of exchange.

This implies that money is broadly acknowledged as a strategy for payments. When I go to the market, I am certain that the clerk will acknowledge my payment of cash. Indeed, U.S. paper cash conveys this announcement: "This note is legitimate delicate for all obligations, public and private." This implies the U.S. government secures my entitlement to pay with U.S. dollars.

Properties of Money

In Irvin Fisher's influential book, *The Purchasing Power of Money*, he outlines the classical Quantity theory approach. To calculate the link between the total quantity of money 'M' (the money supply) and the total amount of spending on final goods and services produced in the economy PxY , where P is the price level and Y is the aggregate output (income). Total spending PxY is also thought of as nominal GDP. The Velocity of Money is that concept that provides link between M and PxY (often called Velocity), the rate of turnover of money, which is the average number of times per year that a dollar is spent in buying the total amount of goods and services produced in the economy.

To be precise, Velocity is defined as total spending $P \times Y$ divided by the quantity of money, M (Fischer, 1911).

$$V = \frac{P \times Y}{M}$$

For example, imagine a relatively small economy of \$100, Customer A sells corn and Customer B sells milk. Customer A starts out by buying \$100 worth of milk from Customer B and vice versa, Customer B trades \$100 worth of corn from Customer A. Customer A' and Customer B's economy has a gross domestic product of \$200. Even though the money supply is only \$200. If they continue the transaction for a year, their GDP will be \$2400 that year, though the money supply is only \$100. Thus:

$$GDP = Money Supply \times Velocity of Money$$

or

$$M \times V = P \times Y$$

By multiplying both sides of this definition by M, we must get the equation of exchange, which relates nominal income to the quantity of money and velocity. The equation of exchange thus states that the quantity of money multiplied by the number of times that this money is spent in a given year must be equal to nominal income.

So, as to welcome the comforts that cash conveys to an economy, consider existence without it. Envision I am an artist, a bassoonist in an ensemble who has a vehicle that should be fixed. In a world without cash, I would need to bargain for vehicle fix. Actually, I would need to discover an occurrence of needs the far-fetched case that two individuals each have something that alternate needs at the perfect time and place to make a trade. Ultimately, I would need to locate a technician who would trade vehicle fixes for a private bassoon show by 9 AM tomorrow, so that, I can drive to my next symphony practice.

In an economy where individuals have peculiar abilities, this sort of trade would take an extraordinary measure of time and exertion; truth be told, it may be almost futile. Cash lessens the expense of this exchange in light of the fact that, while it may be extremely hard to locate a technician who might trade vehicle fixes for bassoon shows, it isn't elusive one who might trade vehicle fixes for cash. Truth be told, without cash, each exchange would expect me to discover producers who might trade their merchandise and enterprises for

bassoon exhibitions. In a cash-based economy, I can move my administrations as a bassoon player in a symphony to the individuals who are happy to pay for orchestra shows with cash. At that point, I can take the cash I gain and pay for an assortment of merchandise and services.

Business analysts state that the innovation of cash has a place in indistinguishable classification from the extraordinary creations from the past, for example, the wheel slanted plane, yet how did money evolve? Early types of cash were regularly commodity money that had value since it was made of a stuff that had value. Instances of commodity cash are gold and silver coins. Gold coins were significant on the grounds that they could be utilized in return for different products or services, yet in addition on the grounds that the gold itself was held in high regard and had different uses. Goods/Commodity money offered path to the following stage-representative money.

Representative money is a authorizing document or token that can be traded for the underlying goods. For instance, rather than conveying the gold item cash with you, the gold would be kept in a bank vault and you may convey a paper declaration that speaks to or was "sponsored"- by the gold in the vault. It was comprehended that the endorsement could be used to reclaim gold whenever. Additionally, the authorizing document or token was less demanding and more secure to convey than the genuine gold. After some time individuals developed to believe the paper documents as much as the gold. Representative money prompted the utilization of fiat cash the sort utilized in present day economies today.

Fiat cash is money that doesn't have intrinsic value and doesn't represent an asset in a vault somewhere. It's worth comes from being declared "legal tender"-an acceptable kind of payment-by the govt. of the supplying country. In this case, we tend to settle for of the money because the govt. says it has value and people value it enough to just accept it as payment. For instance, I accept U.S. dollars as income because I am certain I will be able to exchange the dollars for products and services at local stores. Because I do know others can accept it, I'm comfortable accepting it. U.S. currency is paper currency. It's not a commodity with its own

great value and it doesn't represent gold-or some other valuable commodity-held in a vault somewhere. It's valued as a result of Its legal tender and folks have faith in its use as money. There are several sorts of cash in history, however some forms have worked higher than others because they need characteristics that make them more helpful. The characteristics of money are sturdiness, mobility, divisibility, uniformity, restricted supply, and acceptability. If fiat currency solely holds value because governments have told United States of America it will, then what can we really value? If we unleashed ourselves from federal banks, how would the science behind money change?

Many societies have robust emotional ties to physical cash and the consumerism that drives its spending. For a whole generation, individuals were told to deposit their hard-earned money in banks. In exchange for this favor, the banks guaranteed them that they'd be set forever as a result of the interest they'd earn. However, the rate of interest has been barely hovering higher than zero for a long time, and paired with inflation, people's buying power has truly been steadily eroded (Ritcher, 2018). And then there are people who can't even participate during this economy: As per The World Bank's global money Inclusion report (Mesropyan, 2016), only 47th of individuals in low- and middle-income countries have bank accounts.

Furthermore, our current economic system functions on debt, and therefore the majority of the "new cash" is generated by lending others money we don't even have. In different words, we have a tendency to try to form unceasing economic process via the utilization of inflationary currencies, backed by nothing but debt. (Most cryptocurrencies, on the contrary, are deflationary in nature (Hulleman, 2017).)

As time progresses, governments and central banks can develop a stronger foothold over their population, and their presence can grow in influence. In reaction, people can try and discover ways in which to exchange value with one another without government intervention. Wealth gap is on advancing rapidly (Frisby, 2018), and also the figure of poor people is growing day by day. In a sense, we're coming back to the past. The worldwide

economic framework began with bargaining, and we are currently embracing a identical system on a digitized stage. These tokens, similar to the rice, cowries and cigarettes of the past, don't need value allotted by some centralized, outside entity: They can simply be utilized in detailed, clear-cut, distinct types of exchange inside a network of peers.

Everything does not have to have a sticker price on it to be worth something. There are numerous different skills, products, and services we can give that are of equivalent incentive to cash, if not more. We have to give "value" an entire other set of meaning.

Yet, it is additionally important to take note of that the unique job of cash among economic gods has, in the event that anything, been over-estimated. The niggling issues of the pinpointing of the buying power of money have generally been treated as though they don't share anything or next to nothing for all intents and purpose with the issues of non-monetary trade. This led to a unique status of monetary theory and has been harming the development of economic understanding. Indeed, even today, we frequently experience efforts to protect certain unjustified quirks of monetary theory.

Roscher's generally cited comment, "the wrong meanings of cash can be separated into two primary gatherings: Those which consider it more and those which consider it as not exactly the most saleable good" (Röscher, 1918), applies not exclusively to the topic of the meaning of money. Indeed, even some of the individuals who consider the theorem of money a piece of catallactics go excessively far in underlining its exceptional position. This part of our science offers a lot of troubles and it isn't important to develop counterfeit issues; the current ones contribute enough challenge.

Characteristics of Money

Let's compare two examples of possible forms of money and discuss their properties:

- Corn. Used as money at different points in time as part of Barter exchange.
- A stack of U.S. 20-dollar bills equal to the value of one corn cob.
 - a. Durability.

Corn is perishable, however a long trip to promote runs the chance of getting rotten and may severely reduce its worth. Twenty-dollar bills are fairly durable and could be simply replaced if they become worn. Even better, a long trip to promote doesn't threaten the health or value of the bill.

b. Portability.

Whereas the huge amounts of corn are hefty to transport to the shop, the currency is simply kept in my pocket.

c. Divisibility.

A \$20 bill are often traded for different denominations, say a 10, a 5, four 1s, and four quarters. A corn cob, on the other hand, isn't very divisible like money.

d. Uniformity.

Corn cobs come in several sizes and shapes and each possess a different value; cobs of corn don't seem to be a very uniform type of cash. Twenty-dollar bills are all identical size and shape and value; they're very uniform.

e. Limited supply.

So as to keep up its value, money should have a restricted supply. Whereas the supply of corn isn't fairly restricted, if they were used as cash, you can bet farmers would do their best to cultivate more corn, which might decrease their worth. The supply, and thus the worth, of 20-dollar bills are regulated by the Federal Reserve System so that the cash retains its value over time.

f. Acceptability.

Albeit corn has intrinsic value, some individuals might not settle for corn as cash. In comparison, individuals are quite willing to simply accept 20-dollar bills. In fact, the U.S. government protects your right to use U.S. currency to pay your bills. You can consider money as a yardstick—the device we tend to use to calculate value in economic transactions. If you're buying a brand-new laptop, the value may well be quoted in terms of t-shirts, bicycles, or corn. So, as an example, your new laptop may cost you a hundred to one hundred

fifty bushels of corn at today's prices, however you'd find it most useful if the value were set in terms of cash because it is a standard measure of value across the economy.

SWOT Analysis: Money

Strengths

Figure 1.2.a. looks at the SWOT analysis of traditional FIAT currency.

State Backed

FIAT money is government backed currency and is recognized by the central authority as legal tender. If I work these days and earn \$25, I will hold on to the sum before I spend it because it will hold its worth till tomorrow, next week, or maybe next year. In fact, holding money is a more practical method of storing value than holding alternative things of value for example, corn, which could rot. Although it's an economical store of value, money isn't an ideal store of value.

Elastic Supply

This means the quantity is sensitive with a change in demand. Governments can more print money and adjust to demand to address shortage.

Portability

Since the inception of FIAT currency in the early 11th century China, the idea has been to make it portable and be productive on the go. Unlike metallic barter system, FIAT money has always been light and compact and easy to exchange.

Cheap to Produce

Not only is it portable, it is easier to produce paper money as well, according to the data by U.S. Bureau of Engraving and Printing, it costs as little as 5.6 cents to make a \$1-dollar bill.

Weaknesses

Subject to Inflation

Printing money to sustain growth may lead to inflation. In the case of India, as the amount of rupee exceeds a certain limit, its value decreases because more dollars are chasing

fewer items which inflates prices. In the event of hyperinflation, government prints more money to compensate the fact that the old notes are losing its value. Inflation slowly erodes the buying power of money over time.

Fragile

Paper money by nature is subject to damage. Such notes in the U.S. are taken to the U.S. Bureau of Engraving and Printing who then assess the notes and decide to discard or print new notes.

<p>Strengths</p> <ul style="list-style-type: none"> • State Backed • Elastic supply • Portability • Cheap to produce 	<p>Weaknesses</p> <ul style="list-style-type: none"> • Subject to inflation • Fragile • Restricted acceptability • Unstable • Demonetization
<p>Opportunities</p> <ul style="list-style-type: none"> • Regulation • Globalization • Widely accepted 	<p>Threats</p> <ul style="list-style-type: none"> • Decentralization • Public Confidence • Demonetization • Counterfeiting

Figure 1.2.a. SWOT Analysis.

Restricted Acceptability

For example, Indian rupee is not accepted in Georgia and one must resort to conversion to a preferred mode of payment such as the native currency or a globally accepted currency such as the U.S. dollar.

Unstable

In terms of paper value, metallic money is valued more such as gold and silver. Because of the issue with inflation, people prefer to keep precious metals such as gold or silver rather than FIAT money.

Demonetization

A government can pull the bills from circulation anytime to curb the bad-actors in the society such as tax evaders, money launderers and black money. Case in point the 2016 bank note demonetization in India.

Opportunities

Regulation

A central authority can introduce new bank notes and charge them interest free and impose heavy censorship on the competitor currency.

Globalization

The world economy could benefit from free trade in a seamless manner by introducing complete economic integration. Although not an easy task, this would solve issues plaguing different currencies worldwide such as currency risk, devaluation etc.

Widely Accepted

Since the paper currency has been around for many centuries, it doesn't require education like a new technology based currency would. For example Bitcoin and the Blockchain systems are virtually non-existent to the commoner. Also the most widely used, if a person wants to start a business, the preferred mode of payment is through FIAT currency. This implies that money is broadly acknowledged as a strategy for payments. When I go to the market, I am certain that the clerk will acknowledge my payment of cash. Indeed, U.S. paper cash conveys this announcement: "This note is legitimate delicate for all obligations, public and private." This implies the U.S. government secures my entitlement to pay with U.S. dollars.

Threats

Decentralization

The amounts of power that people have given the private group of people who, completely over the governments - dictate global finance. Due to the highly centralized nature of the power of issuing money, the idea of decentralized framework of mode of exchange is being raised and many people see it as the way forward.

Public Confidence

The money is only valuable as the people of the country deem it valuable. If the citizens of the country have no confidence in the currency, it would lead to a stage where goods will be traded in kind. Case in point, Zimbabwe in 2008 where the inflation rate was at 89 sextillion percent.

Demonetization

As discussed earlier, a central government can pull a note from circulation either with or without public knowledge. This causes fear among citizens and opt to invest overseas or in precious metals instead.

Gold-Backed Currencies

Certain people, known as “gold bugs” and “perma bears” have an interest in alternative currencies due to their political views and investment predictions (Grinberg, (2011)). These people believe that central banking establishments that have the authority to print extra money, just like the Federal Reserve System, corrupt the economy and thus they do not trust government-backed fiat currencies (those irredeemable for commodities). Consequently, these people choose to hold their wealth and create exchanges in currencies backed by commodities— typically gold. A comparison of Bitcoin to alternative “gold bug” currencies is instructive.

Bitcoin is comparable to the handfuls of gold-backed digital currencies that exist already, like Pecunix or GoldMoney, as a result of it's liquid, digital, simple for end users to exchange

with each other, generally anonymous, and widespread among government-distrusting “gold bugs.” However, Bitcoin is completely different in many key ways:

I. There isn't any central authority which will issue new currency or scam holders of the currency (e.g., by holding fractional reserves whereas promising to carry full reserves)

II. It is fiat currency instead of commodity money

It could also be tough to control because there's no centrally controlling authority.

How is FIAT Different from Cryptocurrency?

Fiat money is a currency that a government has declared to be legal tender, but it is not backed by a physical commodity. The value of fiat money is derived from the relationship between supply and demand, rather than the value of the material that the money is made of. Digital money is not legal tender and not sponsored by a central authority. Fiat usually signifies, "let it be finished." Cryptocurrency infers, "a decentralized and advanced mechanism of trade rendered by cryptography." each are monetary forms, however there are some exceptional contrasts:

I. Fiat money is "legal tender" endorsed by a "central authority." The central government controls the supply and it can appear as physical dollars (for instance Federal Reserve notes), or it can be presented electronically, for example, with bank credit.

II. Like Fiat currency, cryptocurrency is not “legal tender” and it is not backed by a central government or bank (it is decentralized and open-sourced). Its form is more like bank credit sans the bank (in that it is represented digitally, but not backed by a bank or government). The supply is controlled by cryptography and you can't pay your taxes with it (instead you have to pay taxes on it (Cryptocurrencyfacts, 2017)).

In other words, there are not many similarities. Both fiat money and cryptocurrency can be called cash or money, both are different ways of exchange that are utilized to store and exchange value, both can be utilized to buy goods and services, both have their value directed

by supply, demand, work, shortage, and other economic elements, both have their value influenced by the nature of the framework it is in, both can be exchanged on trades. etc.

Cryptographic money, gold, cotton, and a dollar, all possess exchange value. Some value stores like cotton and gold have use value, some like fiat cash and digital money are intended to be a store of value and medium of exchange only. The Coinage Act of 1965, Section 31 U.S.C. 5103, titled "Legal tender," states: "United States coins and money are Legal tender for all purposes such as, taxes, charges, debts, etc.. (Government, 2011)"

For federal tax purposes, virtual currency is treated as property. General tax principles applicable to property transactions apply to transactions using virtual currency (U.S.GOV, 2014).

2. International Financial System

The global financial system is the worldwide framework of legal agreements, institutions, and both formal and informal economic actors that together facilitate international flows of financial capital for purposes of investment and trade financing.

Global Level Financial Markets and Their Roles

A marketplace where buyers and sellers participate in the trade of assets such as equities, bonds, currencies and derivatives are called a Financial Market. Financial markets are typically defined by having transparent pricing, basic regulations on trading, costs and fees.

Financial markets can be found in nearly every Nation in the World. Some are very small, with only a few participants, while others - like the New York Stock Exchange (NYSE) and the Forex markets - trade trillions of dollars daily.

A financial market can be thought of as a location where buyers and sellers meet to exchange goods or services at prices predetermined by supply and demand. The New York Stock Exchange (NYSE) is a great example of a physical financial market that is now a digital financial market, where stocks are bought and sold at prices determined by supply and demand. The stock market is a financial market where financing is provided through the issuance, buying and selling of shares of stock. The stock market is considered a capital market because it provides financing for long-term investments.

The bond market is a financial market where financing is provided through the issuance, buying and selling of bonds. The bond market is considered a capital market because it provides financing for long-term investments. Also, it's possible to buy or invest in bonds with maturities of less than one year. Financial instruments with maturities of less than a year are normally considered to be sold in money markets.

The real estate market is a financial market where financing is provided through the buying and selling of physical properties. The real estate market is considered to be the best

example of a capital market since almost all real estate properties are highly illiquid and normally held for multiple years.

The Forex market is where currencies are traded. The forex market is the largest, most liquid market in the world with an average traded value that exceeds \$1.9 trillion per day and includes all of the currencies in the world. The forex is the largest market in the world in terms of the total cash value traded. Any person, firm or country may participate in this market. There is no central marketplace for currency exchange; trade is conducted over the counter.

Law of One Price

The law of one price is the economic theory that expresses the price of an equivalent security, commodity or asset traded anywhere ought to have a similar price regardless of location when currency exchange rates are taken into account, in the event that it is traded in a free market with no trade restrictions. The law of one price exists since contrasts between asset prices in various locales in the long run be wiped out because of the arbitrage opportunity.

Like the price of any good or asset in a free market, exchange rates are determined by the interaction of supply and demand. To simplify our analysis of exchange rates in a free market, we divide it into two parts. First, we examine how exchange rates are determined in the long run, then we use our knowledge of the long-run determinants of the exchange rate to help us understand how they are determined in the short run. The starting point for understanding how exchange rates are determined is a simple idea called the 'Law of One Price.' If two countries produce an identical good, and transportation costs and trade barriers are very low, the price of the good should be the same throughout the world no matter which country produces it.

Example:- Suppose American steel costs \$100 per ton and identical Japanese steel costs 10,000 Yen per ton. For the law of one price to hold, the exchange rate between the yen and

the dollar must be 100 Yen in Japan(the price of Japanese steel) and one ton of Japanese steel sells for 100 in the United States (the price of U.S. Steel). If the exchange rate were 200 yen to the dollar, Japanese steel would sell for \$50 per ton in the United States of half the price of American steel, and American steel would sell for 20,000 yen per ton in Japan, twice the price of Japanese steel. Because American Steel would be more expensive than Japanese steel in both countries and is identical to Japanese steel, the demand for American steel, the resulting excess supply of American steel will be eliminated only if the exchange rate falls to 100 yen per dollar making the price of American Steel and Japanese steel the same in both countries.

The Participants

Governments and Central Banks

These are some of the most influential participants involved with currency exchange. The central banks and federal governments. In most countries, the central bank is an extension of the government and conducts its policy in tandem with the government.

Government representatives typically have regular consultations with central bank representatives to discuss monetary policy. Thus, central banks and governments are usually on the same page when it comes to monetary policy.

Banks and Other Financial Institutions

In addition to central banks and governments, some of the largest participants involved with forex transactions are banks. Most individuals who need foreign currency for small-scale transactions deal with neighborhood banks.

The Interbank market is the market through which large banks transact with each other and determine the currency price that individual traders see on their trading platforms. These banks transact with each other on electronic brokering systems. Only banks that have credit relationships with each other can engage in transactions. The larger the bank, the more credit

relationships it has and the better the pricing it can access for its customers. The smaller the bank, the less credit relationships it has and the lower the priority it has on the pricing scale.

Banks, in general, act as dealers in the sense that they are willing to buy/sell a currency at the bid/ask price. One way that banks make money on the forex market is by exchanging currency at a premium to the price they paid to obtain it.

Commercial Hedgers

Some of the biggest clients of these banks are businesses that deal with international transactions. Whether a business is selling to an international client or buying from an international supplier, it will need to deal with the fluctuating currencies.

For example, if a European company wants to import steel from the U.S., it would have to pay in U.S. dollars. If the price of the euro falls against the dollar before payment is made, the European company will realize a financial loss. As such, it could enter into a contract that locked in the current exchange rate to eliminate the risk of dealing in U.S. dollars. These contracts could be either forwards or futures contracts.

Institutional & Private Speculators

Another class of market participants involved with foreign exchange-related transactions is speculators. Speculators attempt to make money by taking advantage of fluctuating exchange-rates. Some of the largest and most controversial speculators on the forex market are Hedge-funds, which are essentially unregulated funds that employ unconventional investment strategies in order to gain large returns.

The most famous of all currency speculators is probably George Soros. The billionaire hedge fund manager is most famous for speculating on the decline of the British pound. A move that earned \$1.1 billion in less than a month. On the other hand, Nick Leeson, a derivatives trader with England's Barings Bank, took speculative positions on futures

contracts in Yen that resulted in losses amounting to more than \$1.4 billion, which led to the collapse of the company.

Figure 2.2.a., outlines the infrastructure and intermediaries in cross-border banking that have been in place since the '70s. Money travels through a long list of banks and intermediaries before reaching the Customer 2 from Customer 1, who unfortunately has to pay the taxes and charges levied by those depicted above. On the contrary, a blockchain based currency has the potential to remove any and all middlemen from spaces such as banking, finance and retail. Before blockchain, purchasing and moving required a middle person, a bank or representative who housed your money related data on their PCs. When you exchange assets or make a transaction, a broker records the change in the bank's system. No more.

Case: The Banking System in India

In this sub-chapter let's take a look at the Indian Financial System. The treasury that deals with the economy of India within the Indian Government is called the Ministry of Finance. Let's look at the structure of the Indian Financial System.

The regulator of Indian banking system is Reserve Bank of India. It consists of Apex Institutions, Commercial Banks, certain Co-operative banks and a few supporting banks. Reserve Bank of India(RBI) is one of the Apex level Institution for certain functions and the RBI regulates the entire banking system in India. The second regulator is Securities and Exchange Board of India or SEBI. Third is Insurance Regulatory Development Authority(IRDA) and the last one is PFRDA or Pension Fund Regulatory Development Authority.

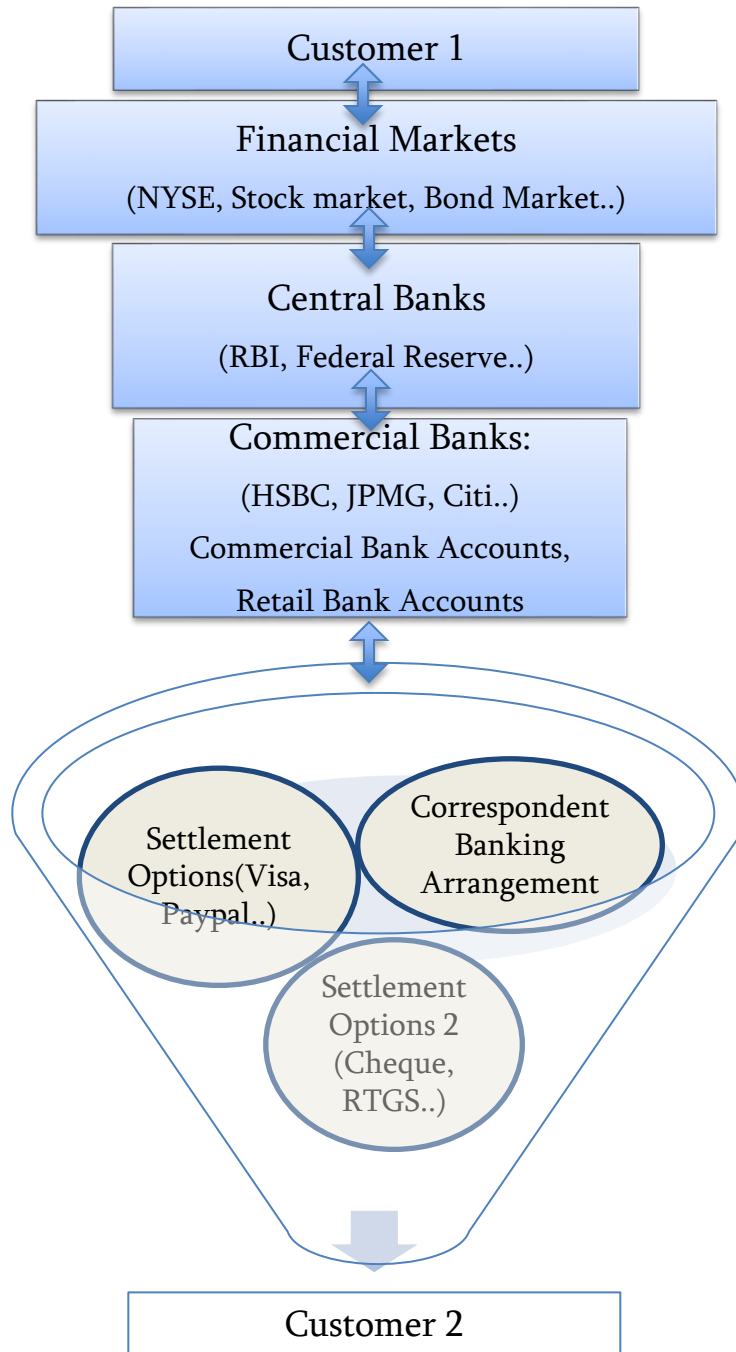


Figure 2.2.a. Flow of money

Reserve Bank of India

RBI is India's central bank and controls the issuance of Indian rupee.

It regulates:

- a) Commercial Banks- State Bank of India(SBI), ICICI Bank, HDFC, HSBC, Kotak Mahindra etc.
Co-operative Banks- Ahmedabad Mercantile Co-Op Bank Ltd., Bombay Mercantile Co-operative Bank, Goa Urban Co-operative Bank etc.
- b) Financial Institutions- National Bank for Agricultural and Rural Development(NABARD) comes under this category, Infrastructure Development Finance Company(IDFC), etc.
- c) Non-Banking Financial Companies(NBFCs)- Cannot offer traditional services that commercial banks provide such as opening a saving account etc. But it offers lending and insurance such as gold loans, acquire government shares, stocks, offer chit fund etc. Some popular companies are Shriram Transport Finance Company Limited, Bajaj Finance Limited, Muthoot Finance Ltd. etc.
- d) Securities and Exchange Board of India(SEBI) - SEBI creates and regulates anti-fraud Mutual funds market or the stock exchange market. This is the primary function of SEBI. The merger of erstwhile commodities regulator Forward Markets Commission (FMC) with the Securities and Exchange Board of India (SEBI) in 2015, which marked a beginning in the direction of forming a unified financial regulator. Acting as a regulator of Foreign Institutional Investors such as HSBC and other Foreign Institutional Investors(FII) that invest in Indian companies that are registered with the Securities and Exchange Board of India.
- e) Insurance Regulatory Development Authority(IRDA) - IRDA is the regulatory body that governs General and Life Insurance policy companies in India. They also look after Life Insurance Company which is a public entity and also govern private insurance and asset management companies such as Reliance, Bajaj Allianz, Tata AIA, Birla Sun Life Asset Management etc.
- f) Pension Fund Regulatory Development Authority(PFRDA) - The statutory body for regulation of pensions which is established under the Ministry of Finance, India.

Government Plans On Making It Illegal

Banking might not be up everyone's alley but the bank's primary function of providing loans to people and businesses is crucial for the development of society. With the rise of FinTech and blockchain based financial services, we can see a revolution shaping up for the future. But the draft of Banning of Cryptocurrency and Regulation of Official Digital Currency Bill 2019 has purportedly proposed a 10 year jail sentence for individuals who "mine, create, hold, sell, transfer, dispose, issue or deal in cryptographic forms of money".

Alongside making it illegal, the draft law additionally proposes to make holding digital currencies a non-bailable offense. This denotes the end of expectations that the Modi government 2.0 would consider changing its longstanding ominous position on cryptocurrencies. With a restriction on other well known digital currency like Bitcoin, the Indian government may be planning to launch one of its own. As indicated by a report by the Bloomberg Quint, the Modi-administration is dealing with an official digital currency for India called 'Advanced Rupee'. This centralized currency may be launched after consultations with the central board of the Reserve Bank of India.

While fanboys see this in a positive light. The cryptocurrency community's dissent to a centralized nature is a testament to this. Changpeng Zhao, Chief Executive of Binance stated that such a bill will only the privacy coin movement forward. Some even compare the times when China banned cryptocurrencies. Governments can profit by the embracing of digital currencies by expanding their capability to screen transactions and decrease corruption. By using the blockchain technology, which underlies cryptocurrency, all installments can be tracked and monitored to guarantee that they are not being misused. Also, governments which support cryptographic money would now be able to launch their own govt. backed digital currency, centralizing financial decisions even more.

3. Cryptocurrency and Its Benefits, Particularities and Mechanisms of support

3.1. Benefits of Accepting Bitcoin as Payment

Online and offline businesses can benefit from accepting BTC as cash. Making use of crypto currency payment gateways such as BitPay, Coinbase etc. protects entrepreneurs from the volatility in the market. Adopting innovative methods such as cryptocurrencies not only helps the platform to grow but also opens up the business to the wider audience.

- It's faster, less expensive and efficient

Crypto allows cheap and borderless fast transactions with peer-peer exchanges within a network. This empowers potential clients everywhere throughout the world, even those without access to banks like villages in India or Africa (especially developing nations), to buy your organization's services or items. Because of blockchain and ripple technology an huge sum of £400,000 which would have classically taken a six to seven days to clear, via crypto would turn out to be lightning quick. Seconds as opposed to day's means you can be assured when an installment has been made if at all allowing more efficiency as a large sale of an asset. For example: a house can happen in hours not weeks.

On the cost side, crypto payments are peer-to-peer without a mediator – purchasers send funds directly from their wallet to the merchant's wallet. The way that there are no middle-men implies lower costs in crypto currency payments. To paint a better picture, Visa installment processors as a rule charge a level expense in addition to up to 4% of the all out exchange fees. In examination, digital currency installments are normally a small amount of this and some cryptographic money conventions are exploring different avenues regarding zero. Figure(3.1.a) lists a few retailers and websites that accept cryptocurrencies. The list mentions a few online stores and retailers that accept Bitcoin as payment. They are well established with great community backing, which implies that they are exceptionally good choices to

shop from. So, if you happen to have some Bitcoins and you need to spend them on the web, you can't turn out badly with any of these recommendations.

- **Safer For Both Parties and Reduces Chances of Fraud**

One of the key advantages of accepting crypto money is that they offer unparalleled levels of protection by guarding against fraudulent chargebacks for merchants. In 2016, Retailers lost as much as \$7 billion to chargebacks in 2016 and this could be as high as \$31 billion by 2020. Carmen Mastro Pierro, the proprietor of three e-magazines and a web based business site which accepted crypto money, agrees: "I think accepting crypto coins as a payment is wise for some organizations. Simply offering a few installment alternatives has dependably been connected to higher exchange rates. What's more, few customers feel more secure paying with cryptocurrencies than with PayPal or charge cards."

If you abhor General Data Protection Regulation (GDPR), which a great many people do, in light of the fact that exchanges are anonymous and the information is encrypted before storage you are not putting away client's info and hence drastically lessening the opportunity of fraud and identity theft. Add to this improvements in Artificial Intelligence (AI) and both working in conjunction and we may wind up with a framework that makes choices for our benefit without us essentially understanding its method of rationale. If AI itself is node in a system, there would be practically no chance to get of closing it down.

- **Widen your market and demographic for your product or service**

Accepting cryptocurrency payments could open a whole new door of opportunities for merchants to sell their products or services to customers in foreign markets they couldn't reach before or knew existed. Cryptocurrency installments are borderless so you don't need to stress over whether your bank has a relating bank through which it will wire your installments. Going ahead, cryptocurrencies could likewise power micro transactions with the goal that you can pitch to customers that had previously been unserved or underserved

by traditional financial institutions. Villages of Africa and the developing countries comes to mind where internet is present yet sub-industries can't develop or flourish because of the absence of microfinance.

Furthermore, cryptocurrencies are not bound by a particular nation's exchange rate: rather, they are universally recognized, which makes them increasingly appealing for some businesses. For international e-commerce companies, specifically, these favorable circumstances can be critical.

- The Downsides

One of the biggest justifiable reasons that numerous businesses organizations are careful about accepting cryptocurrency payments are the numerous and continuing media reports of hacks and lost user funds. A hack happened on a Japanese exchange to the value of about \$60 million. The exchanges are commonly exceptionally secure however it doesn't instill confidence on an entrepreneur as compared to a bank. Decentralized exchanges with purported "unhackable blockchains" are coming but it will require time.

The second factor postponing the transnational use of cryptocurrency is the unbelievable levels of volatility that cryptocurrencies go through. The cost of a cryptocurrency could rise/fall as much as 20% in only hours and essentially unlike the cost of goods normally where the fiat value is set for example an espresso will dependably be valued at £2 paying little respect to the Sterling rate of exchange, when utilizing Bitcoin the cost of merchandise could fluctuate by 20%. Numerous entrepreneurs will be worried if the estimation of their cash in the bank all of a sudden decays by as much as 10% overnight.

A third issue is a process for accepting cryptocurrency payment still requires a lot of technical skill past the ability of the normal business owner. Beginning with setting up a particular wallet which suits their needs, understanding smart contracts, hedging volatility and this is before tax and accounting. The accepting and managing payments are as yet a huge piece of independent business admin and there is dependably a human mistake or technical error. Cryptocurrency payments are anyway irreversible; i.e., payments made with

cryptocurrency to shippers are final. To turn around an installment, for the normal business owner, could be too much in a busy shop for example.

Name	Description
Microsoft	You can use Bitcoin to purchase games, movies, and apps in the Windows and Xbox stores; from your Microsoft account. Deposits made to the platform is refundable.
Expedia	This infamous travel technology company teamed up with Coinbase and has been accepting Bitcoins since 2014.
Shopify	A similar e-commerce platform like Amazon and e-Bay, has been accepting Bitcoins since 2013 and has partnered up with Bitpay.
More Stamps Global	A site that helps you book flights, taxi, hotels and more. Recently announced that they will accept more than 40 different cryptocurrencies.

Figure 3.1.a. Websites that provide transaction services

In general, these are the risks in accepting crypto:

- a) Security - Keeping your wallet safe.
 - b) Volatility – Prices move a lot in contrast with fiat.
 - c) Censorship - The regulatory and tax schemes are subject to your jurisdiction.
- What Determines the Price of Bitcoin?

“Labor theory of value,” the gospel of the Marxist Economists state that the value of the product or service is determined by the effort required to produce it. On the other hand, “subjective value,” is when a product’s price is determined by what the customer is willing to pay for it and not the work required to produce it. And by far this is the correct way to understand the valuation of BTC. As we discussed in previous chapters, Bitcoin not only has value in the payment system but also as an asset(store of wealth). Although there are plenty

of competitors for BTC, there are none that are widely integrated or used than Bitcoin. Let's look at a few factors that influence the value of BTC.

Supply and Demand

The Price of bitcoin is determined by the market it operates in; the market in which it trades. In layman terms, when the demand for Bitcoin increases, the price of bitcoin increases and when demand falls, price falls. Bitcoin is created on a predictable and decreasing rate, which means demand must follow this level of inflation and moreover, there is only a limited number of bitcoins in circulation. Even though still relatively small in the market compared to what it can accomplish, huge sums of money can still influence market price, owing to its highly volatile nature. A key point to note is that price is different to value.

Price is what a customer would like to pay today for what the product is worth but on the other hand, value is what the customer sees in the product that he believes would increase in the future. In this particular scenario, customers are willing to pay more for a product for what it is worth today to get a return on investment in the future. BTC is becoming more stable today compared to what it was during its inception. If something is rare and attractive in proposition, like BTC, it will and can demand a value and price which are influenced by supply and demand.

To summarize, like any new advancement in technology, software or service, a business is aiming to utilize its value researching intensely, asking specialists in the field and seeing each and every part of the advantages and disadvantages before the incorporation happens. This could be the start of a bright future for payments and business transactions as we know it.

3.2. Ease of Use and Adoption

DLT organizations, cryptocurrencies and cryptoassets need to put resources into 'design thinking' as easy to use configuration is at the center of any fast adopted technology. Like how smartphones were in the beginning. Harkening back to the Blackberry days. This

encourages the commitment of two primary crowds - individual users and bigger organisations. For selection to develop past in tech-savvy crowds and involve a wide base of individual clients, availability of blockchain-related technologies play an essential job. For instance, wallet technologies that enable clients to transfer crypto-assets frequently require the a certain level of an advanced technical expertise, for example, addresses and public-private key encryption. Furthermore, clients as well as operators of exchange platforms regularly face troubles working with traditional-money based financial institutions during exchange process of cryptocurrencies/assets for fiat money. However, institutions, for example, banks, central banks and govts. are thinking about embracing DLT in different settings ranging from growing intra-bank exchange speed and cost-effectiveness to guaranteeing the transparency of overseas aid programs.

Looking at a how attractive is Money transferring with cryptocurrencies so dear, let's compare traditional and cryptocurrency services. To start with, one would go to Western Union(WU) or similar service and disclose to them that money needs to be sent overseas, handover all the details of the beneficiary including the city and nation they live. They will take the data and do everything else to guarantee that the money reaches the intended destination. A few firms may do same-day-transactions for an additional charge, yet more often than not it might take days, and expenses may fluctuate as indicated by the sum you are sending just as how quick you want your cash to get to its goal. You can likewise exchange money on the web, which more often than not makes similar procedures.

It's easy and very straightforward, however charges can be high and the actual transaction is slow. Furthermore, in case you're doing this through bank wire, banks collect significantly more data, account number, routing number, SWIFT code, and so forth and pay a lot higher charges than, say, services like WU. Exchanges can take 3 to 5+ days to get to your aforementioned destination. The general consensus regarding a bank wire transfer is that it is never a smooth ride. It's a hassle. The blockchain and cryptocurrency technology happens to be an innovative idea altogether from traditional financial framework, its akin to

when we initially found out about the internet, it was new, modern, fast, however it didn't feel as cool or as easy to everybody.

The whole procedure is accessible online. Suppose you might want to send Bitcoin, utilizing your credit/check card, you send your fiat money to a crypto exchange to purchase Bitcoin and from that point send it to your goal/beneficiary's wallet. The beneficiary will get it in their wallets in merely seconds. The person will at that point bring the WCO into an exchange¹, convert it to fiat cash and pull back the cash directly to their bank account. That's it. Done. If you already have cryptocurrency, you can avoid the exchange procedure and it will be even quicker. It may be difficult to send 10,000 USD to another nation through a money transfer service like WU or bank wire, however convert it to cryptocurrency, and you can send it to anybody, anyplace, in a matter of seconds/minutes on the blockchain.

Cash transfer utilizing crypto is a procedure like no other:

- No intermediaries;
- Lightning Fast;
- Very Secure;
- At Your Convenience;
- From any part in the world;
- To whomever you need;
- As much as you want.

But critics argue that although it is faster it might not be practical because, first, you have to exchange US dollars for bitcoin, where you'll lose on the exchange rate between the trade. And then, at that point you have to exchange bitcoin for euros, where you'll again lose cash on the exchange rate. These "double charges" is a main issue behind why exchanging through bitcoin as in general will be more costly than exchanging through peer-to-peer platform, outside exchange (or "forex") and even banks. With cryptocurrency you should be aware of

¹ Cryptoexchanges like Coinbase, Binance, Cointree etc.

the trading costs; If you would prefer not to lose cash, this is a procedure you should be mindful about so as to make the best trade possible on the exchange platforms. Be advised as it is still an unstable market which you can make it work to your advantage.

Most cryptocurrency wallets and exchanges don't charge fees. Withdrawals and transfers with applications like the Okane Pay App, you pay under 1% of the sum you are transacting. There are additionally charges to execute on the blockchain, which will cost a few dollars relying upon to what extent you remain and execute on the stage (Same for the individual getting). In contrast with the conventional strategies it is less expensive without a doubt. A decent start is to create a set-and-forget service, where a client needs to do nothing else except for send cash to a bitcoin platform. The bitcoin stage would deal with the rest, including the conversion and exchanging to the beneficiary. Although money transfer services would already be able to do this, bitcoin would bring to the table a similar convenience before it can get up to speed.

Case Study: Western Union

As the Co-founder at Satoshi Citadel Industries, a FinTech startup company focusing on Filipino workers who send money back home, Miguel Cuenta puts it, “Our dream is to be the global leader in building a blockchain future that empowers you. (Cuneta, 2018).” Remittance industry is one marketplace where blockchain could really shine and crypto-currencies can prove their worth. Right now, the market is dominated by Western Union, Moneygram and Ria.

To send \$100 to Georgia(Figure 5.1.a.), Western Union charges \$12 and in comparison when we use a blockchain based remittance service for example Ripple(Figure 5.1.b.) based xRapid, the transaction costs are as low as 0.00004 XRP(\$0.001209 at pressing time) regardless of how much 1 XRP is worth. To add the cherry on top, the transaction time is about 3 seconds (Figure 3.2.a.). A blockchain based solution can minimize the transaction charges or

the fees to almost nothing or zero compared to the more common methods such as Western Union.



Fees for Sending \$100.00 to Georgia

Destination: Georgia

ZIP Code: 0105

Amount⁴: 100.00 USD

[Update >>](#)

	Send online	Send in person	Use mobile app	Send by phone
For cash pickup at an agent location				
 PAY WITH Credit/debit card ²	SERVICE ¹ In Minutes	SENDING 100.00 USD	FEE 12.00 USD	Send Online >>
 PAY WITH Bank account	SERVICE ¹ 4 Business days	SENDING 100.00 USD	FEE 11.00 USD	Send Online >>

¹ Funds may be delayed or services unavailable based on certain factors, including the amount sent, destination country, currency availability, regulatory issues, identification requirements, agent location hours, differences in time zones, and selection of delayed delivery options. Additional restrictions may apply; see our terms and conditions for details.

² If you're using a credit card, a card-issuer cash advance fee and associated interest charges may apply. You can avoid these fees by using a debit card.

⁴ The amount you can send may vary based on a number of factors, including your selected send and/or payout channel or location.

Figure 3.2.a. Western Union transaction charges.

For Ripple (XRP) this is a lucrative opportunity as they have partnered with Barclays and MasterCard to further their efforts in the remittance industry. They are not the only major players in this market as Alibaba founder Jack Ma's Ant Financial Services looks to serve the Blockchain Remittance Market by bringing down the transaction charges close to zero.

On a broader perspective, the financial sector is up for a major evolution where consumers can benefit by adopting such new innovations such as the Blockchain Remittance services.

4. Comparative Analysis: Crypto and Traditional Currency

Let's analyze the main points of Crypto and its more traditional counterpart. Bitcoin, based on the Blockchain technology, has a major advantage here in terms of Decentralization. According to the supporters of cryptocurrency, decentralization is one of the greatest benefit Bitcoin provides. Due to the peer-to-peer nature, it boasts low transaction fees and fast transactions compared to traditional currency's T+3 day trade rule. While, no third-party is necessary to complete Bitcoin transactions, governments, banks and financial intermediaries have no chance to getting in between user exchanges. In the case of FIAT currency, it is a centralized currency regulated under statutory laws of the central bank of it's respective country.

Since Bitcoin is decentralized, the supply is constrained and it can't be made arbitrarily, Bitcoin is resistant to inflation. Therefore, the purchasing power of each bitcoin won't decline on the grounds that there are more bitcoins being made and overwhelming the market. There are just a sum of 21 million bitcoins that can be mined, right now there are over \$17 mil at the time of writing. You store your Bitcoins in a crypto-wallet. The wallet contains none of your personal information, thus, by keeping your personal details protected while you make transactions, Bitcoin blocks identity theft which cannot be said about FIAT currency as chance of theft is high whilst in transit. Couple of the weaknesses of BTC is that, by far, currently it is traded a commodity and this, due to the highly volatile nature of the forex markets is a major drawback considering its counterpart.

If one is looking for a faster payment speed like VisaNet and PayPal, BTC is not there yet. At least for now. Scalability solutions are on the rise and one particular solution is called the Lightning Network which essentially creates another layer over the main block thus allowing BTC for faster transactions as small transactions are not recorded unless there's a dispute. Printing money to sustain growth may lead to inflation. In the case of India, as the amount of rupee exceeds a certain limit, its value decreases because more dollars are chasing fewer items which inflates prices.

	Cryptocurrency	Traditional Currency
Strength	Decentralization, Transaction fees, Immunity to inflation, Personal data protection.	State backing, Banks protect your assets and deposits.
Weakness	Scalability, Volatility, Energy Consumption, Transaction Speed	Centralized, High Transaction costs, Prone to inflation
Opportunities	Financial Crisis, Inflation Increase, Network effect	Regulation, Globalization, Widely accepted
Threats	Regulation, Adoption, Link to criminal activities, Media Coverage	Decentralization, Public Confidence, Demonetization, Counterfeiting

Figure 4.1. Comparative Analysis of Cryptocurrencies and Traditional Currency.

In the event of hyperinflation, government prints more money to compensate the fact that the old notes are losing its value. This will not happen to BTC as there's only a limited supply of coins available to mine. That figure is set at 21 million. Considering the highly volatile nature of the international trade market, miners are worried about the sudden price fluctuations on BTC. This doesn't happen very often with traditional currencies.

Looking at the weekly chart from Coinbase(Figure 4.2.), BTC is now trading at \$4,115 which is a 14.4% improvement from what it started of the week with, at \$3,947. This is nowhere the all-time high of nearly \$20,000 on 17/12/2017. Miners worry that if the price of BTC drops under a certain value, the cost of mining will not be justified which will hamper the development of BTC. As traditional currency is prone to inflation, like in Zimbabwe or other economically unstable countries, looking towards an electronic currency would be hugely beneficial.



Figure 4.2. BTC weekly chart from Coinbase.com. Retrieved on 24/02/2019.

In countries like Venezuela, the nation’s hyperinflation is on track to reach over one million percent by year’s end, Venezuela is now ranked fourth in the world of countries that trade the most Bitcoin—totaling nearly 12 percent of all transactions. Unsurprisingly, it is extremely difficult to make any payment in the collapsed state of Venezuela. Although it is widely accepted, cash is limited and conventional payment networks are so overloaded that it regularly takes hours to pay the even the \$4 cab fare in Venezuela. As a result, a growing number of vendors, from grocery stores to hotels and convenient stores, are adopting a way of cryptocurrencies as payment.

Close to 400 vendors seem to be using Dash already, which is another cryptocurrency. Cryptocurrency is also opening virtual humanitarian aid corridors, which have not previously existed in Venezuela. Initiatives such as EatBCH and Bitcoin Venezuela are limiting the suffering of thousands of people by receiving cryptocurrency donations, which are then used to buy and distribute food on the streets of Venezuela. Bitcoin Venezuela, a non-profit organization, feeds about 2,000 people on a daily basis. Within only a few months since being founded, eatBCH operates 18 food distribution centers in 6 states across Venezuela. EatBCH’s model is now being replicated in South Sudan. Like any cutting-edge technology, bitcoin is

also used by bad actors in the society which has garnered attention from law enforcement and tougher censorship will follow.

For example, the Maduro regime is attempting to adopt a state-sanctioned cryptocurrency. A failed attempt to avoid international sanctions and finance its illicit activities. Although cryptocurrencies have initially attracted criminals-given the technology's lack of intermediaries and inherent pseudo-anonymity-they also attract law-abiding citizens, especially those who are in economically-or politically-unstable environments. Tougher laws and sanctions that favor centralized currency will deter people from wanting to use bitcoin or any digital currency on a large scale. Japan has made Bitcoin 'legal tender.' So far, the only one.

Countries like Zimbabwe wouldn't have any problems about announcing BTC as illegal but on the other hand, the European Union feels the need for dialogue. Mario Draghi, the President of the European Central Bank(ECB), said in 2017 that Bitcoin is not mature enough for regulation although already being 10 years old. In the United States, it's a complicated procedure as to who would do the legislating – Federal Government or State-wise? Thanks to its regulatory map. Going back to the Venezuela case, a digital currency is only as valuable as the government says it is. Which deters public from adopting such a facility.

The failure of Petro-a natural resource based crypto currency- is a prime example. If the citizens of the country have no confidence in the currency, it would lead to a stage where goods will be traded in kind. Because of the power vested in the central banks by the government, it can pull any currency notes from circulation without notice. For example, the 2016 Indian banknote demonetization. This can create panic among public who have saved up and have not invested or deposited in banks. Although this was designed to curb black money, it is the law-abiding working-class citizens that were hit hard. A digital currency system wouldn't have such issue as it is decentralized and demand increases as supply decreases.

4.1. Cryptocurrency and Georgia

Whizzing with enough energy to power approximately 50,000 homes, Bitfury, a big bitcoin company, is producing a millions of dollar's of the computerized cash utilizing ultracheap hydropower reaped from waters surging down the volcanic summits of the Caucasus. Indeed, even as the cash has tumbled in value, a huge number of Georgians have hopped onto the game and sold vehicles even their cows to purchase powerful PCs to mine Bitcoin and join what has turned into a state-backed rush toward data supremacy. The in-power Georgian Dream political party sold over 18 hectares of land for 1 U.S. Dollar for Bitfury to set up shop. The administration has been selling energy at a large portion of the rates charged in the United States or Europe, and it has made tax-exempt zones to attract tech savvy businessmen. It is currently a heavy energy consumer, with almost 10 % of its energy yield gone into the digital business.

The nation guzzled such a great amount of energy lately that the World Bank positioned it a standout amongst the most dynamic and active cryptocurrency destinations in the world. Georgia, has been betting it's economy on attracting blockchain tech, the encrypted ledger foundation behind all crypto exchanges. Making use of the blockchain technology, the company Bitfury helped log Georgia's land registry to blockchain, making Georgia one of the first to depend on the secured ledger. The tax system is next in line for the same. Georgia wants to beat Malta, Bermuda and different nations known for light-contact guideline of cryptocurrencies to command blockchain advancement. "The economy's computerized change is our top priority," said George Kobulia, the economy minister to the New York Times. "We're supporting this any way we can."

Applied to property, blockchain innovation serves assurances in a few different ways. In a blockchain-based record, records are time-stamped, as are any changes or corruptions subsequent to those records. This would encourage and allow individuals keen on a particular property to see and check the date of past exchanges. When Bitfury opened its entryways,

Georgia made "free tax zones" where mining operations and power weren't burdened. Whenever Bitcoin and different cryptocurrencies were traded for dollars or pounds, Georgia regarded the trade as an export exempt from value added taxes, so Bitfury could keep their every penny. At the point when Bitfury came to Georgia, one Bitcoin was worth around \$350. It spiked to almost \$20,000 before crashing. Big-shots like Bitfury have the means to continue working.

This however, has affected the smaller mining companies such as Golden Fleece. Currently the average price of Bitcoin stands at \$8505. Around Georgian villages, around 200,000 individuals set up mining stations in their basements and some in their garages. For youngsters particularly who are struggling in a sluggish economy, Bitcoin appeared as an appealing option to making a decent living. As per George Kirvalidze, 35, the previous proprietor of a small internet company in the town of Kvareli, "a large portion of the town's 6,000 families have some sort of a mining rig. The vast majority who purchased in figured high costs would keep going forever," said Mr. Kirvalidze, who has mined over twenty Bitcoins. Tamar Kavtaradze, a librarian at Caucasus International University, says she only intends to use Bitcoin as an investment option and says she prefers traditional bank accounts as opposed to Crypto-wallets. She herself has invested over \$2000 in 2017.

Even farmers got involved at one point thinking that that its far more profitable to own Bitcoin than a cow. Situation is slowly starting to improve. Industry evaluations show that the organization mines a little more than 5% of all Bitcoins, albeit nobody would state what amount was being mined here. Be that as it may, rivals in Georgia figure it was a fortune. Vakhtang Gogokhia, the CEO of Golden Fleece, a little cryptomining start-up, said he was pulling in around 10 Bitcoins a month utilizing one megawatt of energy, enough to light 1,000 homes. Bitfury says it continually devours in any event 45 megawatts of energy, however Mr. Gogokhia suspected it was more.

Critics state the legislature, by backing the activities like Bitfury, is ripping off citizens by compelling them to take care of everything for well-connected businessmen. Zurab Tchiaberashvili, a legislator from European Georgia, the biggest resistance party in Parliament, said the administration's liberality toward Bitfury had denied Georgians of millions in tax revenue. "It's a huge conflict of interest," he said. The rate for the energy prices paid by Bitfury is about 5 to 6 cents per kilowatt-hour.

In conclusion, Georgia is a great destination for cryptocurrency developers and miners alike. Be it the low cost power consumption charges or the governments flexibility in policy when it comes to business development through mining cryptocurrencies. Bitfury might be a state-backed or well-connected of the bunch but it is safe to say a welcoming policy exists in Georgia to tech savvy entrepreneurs as well as tax free zones to maximize profit. Taking steps to modernize tax system by applying block chain technology, beating other major developed countries to the punch as well as implementing blockchain technology to log real estate of the whole of the country can be seen as a progressive step in eradicating corruption, enabling transparency and a leap of faith on technology.

5. Building Trust in Cryptocurrency

A few people express that cryptocurrencies show the eventual fate of world economy, analysts guarantee that regardless of how significant they could be, they will be restricted to an internet sensation. The financial exchange markets are as yet beset by a few issues which obstruct them from really battling with the traditional ones. Can the blockchain world, stay away from the dire straits of centralization by focusing on the action of tech-savvy application based technologies like Qtum and cryptocurrency ATMs?

So, as to settle a few of these issues, cryptocurrencies was on the rise in 2009, utilizing a cutting-edge innovation called blockchain. Cryptocurrency is a form of digital money which uses cryptography as encryption. Blockchain manages the procedure wherein the information is organized and takes into account the nearness of decentralized digital ledgers where specific associations aren't approved to affect information and or transactions. Currently, Bitcoin and Ether are the crypto-money which is utilized to control the Ethereum blockchain are the two most extensively utilized cryptocurrencies. By the present development in demand of cryptocurrencies, a few venture capitalists are attempting to find by which approach to put resources into these cryptoassets.

As with any investment into the newest tech, there are a few conditions to see when assessing their future. So as to make an informed decision, one must examine the foundations of the innovation just as the potential applications and shortcomings within the near future. The principle aim is to analyze, what the cost of Bitcoin (BTC) and Ether (ETH) will be in USD in the accompanying 5 years by careful quantitative and qualitative research. From this study, establish appropriate investment distribution between two currencies for this crypto-portfolio Cryptocurrency ATMs and Banking Barriers.

A straightforward analysis between fiat and cryptocurrencies demonstrates the value of both fiat and cryptocurrency is attained from the synergy of supply and demand. The thing that matters is that fiat cash is controlled by the central government/bank and enables central banks to impose monetary policy, while cryptocurrency is a digital asset that works without

central bank. Hence the term, decentralized. Traditionally, monetary and financial policies are alphabets that enable governments construct a country's economy. The central bank of a country conducts fiscal plans to achieve macroeconomic goals by dealing with the cash supply and the interest rate; while the govt. uses tax policy and govt. spending to achieve fiscal policy.

5.1. Challenges and Solutions

Privacy and Trust

The money is only valuable as the people of the country deem it valuable. If the citizens of the country have no confidence in the currency, it would lead to a stage where goods will be traded in kind. Case in point, Zimbabwe in 2008 where the inflation rate was at 89 sextillion percent. The Zimbabwean 100-trillion-dollar note gives an uncommonly striking knowledge into that nation's to a great extent woeful current financial story. Fears rose as citizens stated that \$500 in the bank is useless but a Bitcoin is always rising in value compared to the U.S. Dollar. To develop trust in a currency is an integral part of the country's own people believing in it as well as provide investors a feeling of security. As discussed earlier, a central government can pull a FIAT note from circulation either with or without public knowledge. This causes fear among citizens and opt to invest overseas or in precious metals instead. The 2016 Indian bank note demonetization is a prime example of this malady. This doesn't affect a cryptocurrency as it is decentralized.

Nonetheless, shrouded secrecy as a result of such innovation may result in concerns in regards to the legal environment. A typical problem of such cryptocurrencies is that, similar to money exchanges, they can be effectively used to support crime because of our failure to track exchanges. Japanese controllers are accounted for to be effectively discouraging cryptocurrency exchanges from trading high privacy coins, for example, Monero, Dash and zCash. In certain countries, nonetheless, advance is being made the other way. For instance,

New York State as of late formally authorized the exchanging of zCash on the Gemini cryptocurrency exchange.

Case Study: Venezuela

In 2018 the Maduro Government of Venezuela launched its own cryptocurrency called the “Petro.” This was widely considered a sham but the government sees this as an alternative to get past the United States sanctions and pay of its \$150 billion of foreign debt. As per a U.K. based portal CoinSchedule, so far the government has managed to raid over \$20 billion in initial coin offerings. This is a great incentive for investors as the high volatile nature of the exchange rates provide great returns. Such was the point of the ICO. This is also the world’s first virtual currency launched by a sovereign nation.

Adoption of Bitcoin has also rocketed since the native currency value started to erode to a permanent state. In a state where the majority work as freelancers, they receive payments in Bitcoins as it doesn’t make sense to receive payment in Bolivars anymore. Since Bitcoin has risen in popularity, the government has started censorship to curb its growth. Limits on how much a person can receive from overseas and so on. Since oil is the only abundant resource in Venezuela, the launch of the Petrocoin makes sense. Something that will not depreciate in value and the added benefit of state backing will increase popularity among commoners which in turn will boost trust. If the government can face the tsunami and reel people into investing in the cryptocurrency, it will be a stable asset and a genuine alternative to the failing Bolivar Sobrano.

Certainly, Venezuela’s interest in digital assets have soared than ever before. A cryptocurrency ATM cash machine was opened last year in the town of Cucuta, near the Colombian border. This serves as a safe means to carrying funds since crime has been on the rise. Where a country is witnessing mass exodus, along the border for a family of four, getting on a bus, carrying their life savings on a 14 day journey is unimaginable. The idea is to exchange the money into Bitcoins and once at their final destination, sell cryptocurrency for the local

currency. This is a prime example where Bitcoin is serving as a practical example in everyday life of ordinary citizens rather than speculators.

Regulation and Reputation

Traditionally, a central authority can introduce new bank notes and charge them interest free and impose heavy censorship on the competitor currency. FIAT money is government backed currency and is recognized by the central authority as legal tender. If I work these days and earn \$25, I will hold on to the sum before I spend it because it will hold its worth till tomorrow, next week, or maybe next year. In fact, holding money is a more practical method of storing value than holding alternative things of value for example, corn, which could rot. Although it's an economical store of value, money isn't an ideal store of value. Also, the supply is elastic, which means, the quantity is sensitive with a change in demand. Governments can more print money and adjust to demand to address shortage.

Similarly, in a Distributed Ledger Technology platform, reputation and trust are very important. A good reputation system utilized by the system makes the system tough against corruption and gaming; and makes a safe ecosystem for network participants to connect and uncover their preferences honestly. Moreover, a company's trustworthiness and its capability to guarantee trust in the framework decides the company's ability to promote superior quality. This is fundamental for pulling in investors, ultimately expanding user engagement and securing monetary longevity. In addition, the immoral nature of certain individuals within the framework can make a negative externality for 'good' actors and prevent the ecosystem from developing.

For instance, unsuccessful/counterfeit ICO launches can cause bad reputation for those that are genuine and influence the credibility of genuine ICOs. As of now, the guidelines being characterized and enforced and bureaucracy around cryptocurrencies and ICOs vary enormously among various countries. For instance, Switzerland, Gibraltar and Australia have adopted a proactive and positive actions towards ICOs; Japan has legalized Bitcoin by pronouncing it a legitimate money, and enabled Ripple to build an application to accelerate

intra-bank exchanges, however China refused to compromise and restricted all ICOs, along with cryptocurrency exchanging and mining in 2017.

Managing Volatility

Printing money to sustain growth may lead to inflation. In the case of India, as the amount of rupee exceeds a certain limit, its value decreases because more dollars are chasing fewer items which inflates prices. In the event of hyperinflation, government prints more money to compensate the fact that the old notes are losing its value. Inflation slowly erodes the buying power of money over time. In terms of paper value, metallic money is valued more such as gold and silver. Because of the issue with inflation, people prefer to keep precious metals such as gold or silver rather than FIAT money.

Volatility can be both a technical and a financial test, and is as of now a noteworthy obstruction to cryptocurrencies turning into a broadly used payment system as it makes troubles identifying with every one of the three functions of money, yet particularly the function of store of value. Despite the fact that issues looked in conventional budgetary frameworks, for example, 'bank runs' are moderately like those being looked by crypto-exchanges, the high instability of crypto-assets can possibly contrarily influence discernments and hamper their utilization in a wide range of long-length exchanges. There have been a few endeavors to address the instability issue through the production of supposed stable-coins which are digital tokens with values proposed to be pegged to those of fiat money. Tether (USDT) is the most notable example. Each USDT token issued is in principle supported bybacked by a US dollar deposited with a curator by the private company Tether Ltd. Be that as it may, the financial and operational straightforwardness of the plan is constrained and token holders must place their trust in, among different elements, the solvency and trustworthiness of Tether Ltd and their caretaker.

On the other hand, Dai is an ERC20² stable-coin pegged to the US dollar created by Maker which does not depend on trusted third parties. Rather, it utilizes smart contracts on the Ethereum system to issue Dai coins overcollateralised by a locked deposit of Ether (ETH). When Dai is reimbursed, the Ether store is released. A related utility coin MKR is planned to be created and sold as a recapitalization mechanism in the event of a drop in the ETH/USD exchange rate leads the system becoming to be under-collateralized, despite the fact that it isn't evident that the system could withstand an abrupt, exceptional and unforeseen change in the ETH/USD exchange rate. Circle's Center task seeks to enable interoperability between various payment providers and stablecoins utilizing their own fiat-collateralized tokens as a link.

Incentives

Incentives are key to support any financial or contractual relationship, since they motivates individuals to act in a specific manner in a financial or business setting. The structure of the correct incentives enables us to accomplish mutual gains when parties engaged with a business relationship have contrasting objectives and have varying degrees of know-how. In the traditional economic framework, key communications between network members should be supervised and facilitated through utilization of incentive-compatible mechanism. In other words, a central authority, for example, an assigned firm, organization or cooperative may parallel services to the system.

After all, DLTs pave a new way for environments to self oversee and organize without the need of a central authority. This way, the fields of game theory, mechanism design and behavioural economics are especially helpful devices and offer rare understanding into designing incentives that will ensure the sustainability and development of an environment and related business plans.

² ERC-20 is a technical standard used for smart contracts on the Ethereum blockchain for implementing tokens.

Ease of Use and Adoption

DLT organizations, cryptocurrencies and cryptoassets need to put resources into 'design thinking' as easy to use configuration is at the center of any fast adopted technology. Like how smartphones were in the beginning. Harkening back to the Blackberry days. This encourages the commitment of two primary crowds - individual users and bigger organisations. For selection to develop past in tech-savvy crowds and involve a wide base of individual clients, availability of blockchain-related technologies play an essential job. For instance, wallet technologies that enable clients to transfer crypto-assets frequently require the a certain level of an advanced technical expertise, for example, addresses and public-private key encryption. Furthermore, clients as well as operators of exchange platforms regularly face troubles working with traditional-money based financial institutions during exchange process of cryptocurrencies/assets for fiat money. However, institutions, for example, banks, central banks and govts. are thinking about embracing DLT in different settings ranging from growing intra-bank exchange speed and cost-effectiveness to guaranteeing the transparency of overseas aid programs.

Looking at a how attractive is Money transferring with cryptocurrencies so dear, let's compare traditional and cryptocurrency services. To start with, you go to Western Union(WU) or similar service and disclose to them you need to send money overseas, handover all the details of the beneficiary including the city and nation they live. They will take your data and do everything else for you to guarantee your money reaches the intended destination. A few firms may do same-day-transactions for an additional charge, yet more often than not it might take days, and expenses may fluctuate as indicated by the sum you are sending just as how quick you want your cash to get to its goal. You can likewise exchange cash on the web, which more often than not makes similar procedures. It's easy and very straightforward, however charges can be high and the actual transaction is slow.

Furthermore, in case you're doing this through bank wire, banks collect significantly more data, account number, routing number, SWIFT code, and so forth and pay a lot higher

charges than, say, services like WU. Exchanges can take 3 to 5+ days to get to your aforementioned destination. The general consensus regarding a bank wire transfer is that it is never a smooth ride. It's a hassle. The blockchain and cryptocurrency technology happens to be an innovative idea altogether from traditional financial framework, its akin to when we initially found out about the internet, it was new, modern, fast, however it didn't feel as cool or as easy to everybody.

The whole procedure is accessible online. Suppose you might want to send Bitcoin, utilizing your credit/check card, you send your fiat money to a crypto exchange to purchase Bitcoin and from that point send it to your goal/beneficiary's wallet. The beneficiary will get it in their wallets in merely seconds. The person will at that point bring the WCO into an exchange³, convert it to fiat cash and pull back the cash directly to their bank account. That's it. Done. If you already have cryptocurrency, you can avoid the exchange procedure and it will be even quicker. It may be difficult to send 10,000 USD to another nation through a money transfer service like WU or bank wire, however convert it to cryptocurrency, and you can send it to anybody, anyplace, in a matter of seconds/minutes on the blockchain.

Cash transfer utilizing crypto is a procedure like no other:

- No intermediaries;
- Lightning Fast;
- Very Secure;
- At Your Convenience;
- From any part in the world;
- To whomever you need;
- As much as you want.

But critics argue that although it is faster it might not be practical because, first, you have to exchange US dollars for bitcoin, where you'll lose on the exchange rate between the trade. And then, at that point you have to exchange bitcoin for euros, where you'll again lose cash

³ Cryptoexchanges like Coinbase, Binance, Cointree etc.

on the exchange rate. These "double charges" is a main issue behind why exchanging through bitcoin as in general will be more costly than exchanging through peer-to-peer platform, outside exchange (or "forex") and even banks. With cryptocurrency you should be aware of the trading costs; If you would prefer not to lose cash, this is a procedure you should be mindful about so as to make the best trade possible on the exchange platforms. Be advised as it is still an unstable market which you can make it work to your advantage.

Most cryptocurrency wallets and exchanges don't charge fees. Withdrawals and transfers with applications like the Okane Pay App, you pay under 1% of the sum you are transacting. There are additionally charges to execute on the blockchain, which will cost a few dollars relying upon to what extent you remain and execute on the stage (Same for the individual getting). In contrast with the conventional strategies it is less expensive without a doubt. A decent start is to create a set-and-forget service, where a client needs to do nothing else except for send cash to a bitcoin platform. The bitcoin stage would deal with the rest, including the conversion and exchanging to the beneficiary. Although money transfer services would already be able to do this, bitcoin would bring to the table a similar convenience before it can get up to speed.

6. Branding and Marketing Mix

A popular belief is that millennials are not brand loyal but it is not true. Millennials are the most likely to be brand loyal that any other demographic. They do not choose which brand to be loyal to at random. Moreover, they are attracted to the story behind the brand and also the values they represent. Generally millennials are attracted to brands that stimulate them with the brand's touching stories, ethical business conduct and those brands that contribute to their personal brands. At the same time, they tend to drift away from big name corporate brands and towards lesser known startups or new companies. Great branding is akin to a great tale, a tale about the quality of the product just as the great company mission behind it and what it will do for you. The product is what matters and not the logo. Therefore, it appeals to both customers and investors, the latter of which may choose to put resources into an organization absolutely based on the quality of its branding. A product is divided into 4 elements:

- Material Product
- Physical Service
- Intellectual Enlightenment
- Emotions

The value of a product depends on how people think of it. So having no centralized authority to and a currency created to run without the intervention of an intermediary in route to the beneficiary should in theory make the people go crazy about the concept of blockchain and crypto-assets. Like money, the value depends on what the makers make of the product. Crypto-asset not a tangible product. To establish trust in the service one of the best ways is for a Government to adopt and encourage its citizens to adopt it as well. Incentivizing transactions based on cryptocurrency, would make its citizens sit back and take notice and embrace the new technology and make it a norm in everyday life.

In the latest paper on the matter of cryptocurrencies published by the European Central Bank(ECU) it states that Cryptocurrencies pose no threat to financial stability in the euro zone. Reason being the combined value of crypto assets is small relative to the financial system and its links to the EU's financial framework is limited.

Hyperinflation

Another factor to address would be to currency stability. Essentially, because of monetary and fiscal policy, inflation makes products expensive and brings down the purchasing power of the currency. Venezuela is a nation that is experiencing hyperinflation. Most recently, in 2017, swelling rose 2,600%. The nation as of late needed to release another denomination, the 100,000 Bolivar note. For reference, that note is worth under \$1. So, this circumstance has prompted somewhat noteworthy financial issues. Some say something as basic as purchasing lunch is excruciatingly agonizing. Individuals are taking bags loaded with Bolivar notes just to get one dinner. Going to shop? Well you better have a truck load to convey the cash you're going to need pay. Hyperinflation as of now causes purchasing products to require a truckload of cash, and it has achieved such levels where it makes purchasing in bulk incomprehensible in light of the fact that you can't convey the cash without a forklift.

Cryptocurrency could help

This is the place Bitcoin comes in. The Venezuelan Bolivar has basically turned out to be worth not exactly the paper it is imprinted on. Residents are looking to the cryptocurrency as a methods for survival. There are various accounts of Venezuelans who have families that they are endeavoring to help during this cash emergency. One lady depicts how she is maintaining numerous sources of income to keep food on the table, however the main reason she can at present feed her family is that she is mining bitcoin. Obviously, bitcoin is just great for this situation, only if it is transacted directly. You need individuals willing to take bitcoin for it to be suitable in this kind of economy. So we've seen a alternate market emerge. The

Bolivar is futile for exchanges, so we are seeing Venezuelans bounce into the Bitcoin economy. An ever increasing number of merchants and vendors are investigating accepting bitcoin, truly in light of the fact that it is their solitary method for putting away any value. Their life investment funds is pointless as is the Bolivar. So they are going to an alternative that has use, and that option is Bitcoin. Numerous Venezuelans are utilizing LocalBitcoins so as to legitimately purchase and sell the cryptocurrency.

Failing Economic Policies and Economic Crisis

Presently behind every money crisis, there is failed government policy. Not going to get into why Venezuela turned out badly, as there are multiple reasons for their economic collapse. Venezuela isn't the first to establish approaches that lead to a currency crisis. Besides, we have seen certain examples create in nations that have experienced similar issues beforehand. At the point when there is a cash emergency, certain approaches are founded that clarify that you don't generally claim or have control of your own money. This includes the administration printing more cash or essentially simply taking their citizens cash. What we're witnessing in Venezuela greatly affects the worldwide financial scale. Bitcoin and different cryptocurrencies can be utilized as a way to get around corrupt government guideline. Presently this may be a double edged sword as some corrupt nations may go to cryptocurrency to evade financial sanctions. It's critical to take note of that Bitcoin doesn't need to supplant a sovereign money. It can exist individually. In any case, the effect it will have on failing economies will be extraordinary.

To sum up, in countries with failing economies, citizens may look to bitcoin to battle hyperinflation or also used as a hedge against the local currency.

6.1. Increasing Its Popularity by Marketing Methods

The **4 Ps of marketing** can play a major role in popularizing Crypto. If local money transfer exchanges could embrace the crypto movement, this would interest millions of expats in sending money home as it costs less and faster. Transferring money overseas as a

trusted medium increases **promotion** and in turn the makes cryptocurrencies popular. Trust and demand are what makes a product valuable. So if government adopts a certain cryptocurrency then they have put their trust in it.(insert something from building trust chapter).This in turn helps the end user immensely by having him keep the money otherwise lost on processing fees etc.

Taking Japan for example, have legalized BTC and taking proactive measures to counter bad actors and activities on the platform. Banks can offer better **products** as this innovative technology can sustain even the most advanced banks in the world. Deutsche bank is confident of the technology and are sure they will not be stuck in the past when the world moves on. This can help banks create better products and services and precisely what they are doing. When more and more people are aware of this technology, and educated, demand rises for the product and so does **price**. One such example is Venezuela where it is people are converting live savings and assets to cryptocurrencies as the Bolivar is failing. Another example is Kenya where Bitcoin, Lisk and Dash are popular, over 73% of the population have a mobile wallet account. The more people use crypto based services, the more chances are for the prices to increase and so does the value added services.

Leading mobile wallet leader M-pesa faces tough challenges from other countries among the African nations. Predominantly from banks as they don't want new players moving in on their turf. Creator of M-Pesa, Safaricom says they can 21 million active users and 17 million transactions per day. Vodafone, owner of Safaricom now wants to offer M-Pesa to the rest of the continent. Chief Executive, Bob Callimore stresses to BBC that the banks that do well are the one who work with M-Pesa. He also said M-Pesa as a competitor not to banks but with cash.

This intern affects the last P in the 4 P's of marketing that is **Place**. Adoption of the service would then promote it to a more household name rather than a trading item in the financial market. Individuals are frequently determined by their impulses as opposed to cold, hard rationale. Individuals settle on silly choices dependent on brand rapport and loyalty

constantly. Millennials are attracted to a brand image that exudes philanthropy. A image of a good brand that donates or does a good deed attracts millennials as per the 2017 Boston Consulting Group (BCG) survey. As per Barry Shore, founder and CEO of Dlyte, the two major trends that will rev up the future are Micro-funding and Innovation. Case in point, the Obama election campaign of 2008. Micro-funding was used to attract young – grassroots – level supporters. The ‘Give \$5,’ even ‘Give \$3’ campaigns were deemed a success that it was replicated in the 2012 Sanders and Clinton campaigns. Bitcoin and other cryptocurrencies could play a role here. Selling a cryptocurrency or a stable coin and allowing supporters, young and old, would increase the popularity and hence help the Coin to position itself better in the marketplace.

Advances in technology will pave way for this way of giving. Using a device to achieve donation immediately, be it small or large, especially given at no cost would play a major role in stimulating the customer to the brand. Being relentless in the face of new and untested technology could be the hallmark of the successful ideas we are to see in the coming years. The fact that a few brands have accepted Bitcoins highlights the enormous potential of cryptocurrencies but also the challenges addressed in the previous chapters. These are all a big step forward from the days where cryptocurrencies were only seen as trading assets in the financial markets.

To sum up, branding is about consistency. Consistency in the colors you use, the words you state and, above all, the experience clients have with your product. Clearly, if the experience is consistently awful, no individual is going to need your product again. Going back to the Tesla example, the way that they have reliably substantiated themselves to think about the client experience and the way that they work effectively to improve that experience has formed a solid impression of the brand. Despite the fact that the Model X experienced some quality issues, Tesla's solid branding and philanthropic work meant clients and fans were loyal to the cause.

7. Results and Discussion

7.1. Findings and Analysis

After the analysis from 100 combined respondents from Tbilisi and social media websites, we obtained the following findings:

As per the graph we can conclude that the survey is largely made up of Millennials and Gen Y populous. Looking at how many people are aware of cryptocurrencies, about 80% of people are aware of Cryptocurrency in some way. Which means seven out of 10 people know about it. Combining data from the 4th question from the survey, which shows us that only one out of 10 buys it. We would get a clear picture that six people out of the seven who were well aware of the product's benefits did not trust it enough to vote for it with their wallets. Therefore it allows us to conclude, that from the two reasons, preventing overall acceptance and popularity of cryptocurrency, that we named to be "lack of social awareness" and "distrust to the product", the last factor to is the one that matters more.

So, what is there to be done from marketing point of view to increase trust towards the product, rather than its popularity which didn't help those six people to make decision in favor of the cryptocurrency? The best advertisement could be word of mouth. If we can convince six out of 10 people to buy, they will convert or convince the rest of the three (who were also uninformed) to buy it. Even though 88% does not own cryptocurrency, it is clear that its not the lack of education that's holding them back but the lack of trust in the matter.

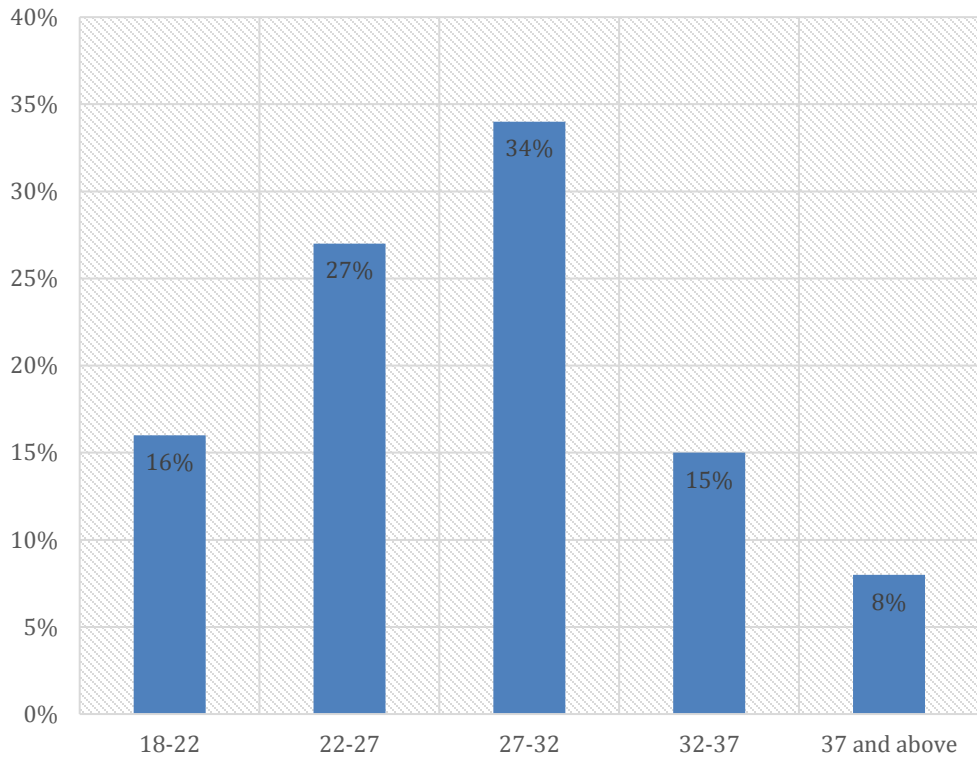
Popularity wise, it is doing okay but lack of trust on the matter, on its merits is what halting the growth of crypto based assets. Even the people who trust it, looking at the data from Q5(Figure 7.5.), the people who invest it don't trust enough. Looking at Q7(Figure 7.7), 'freedom,' was defined as the ability to perform faster transactions and anonymity, and the fact that there was nobody to control it. To the question as to whether the freedom affects the decision in adopting it, the general consensus –more than 50%- was yes. 4 out of 10 people

did not care if using cryptocurrency would save them money that traditional banking process would otherwise levy.

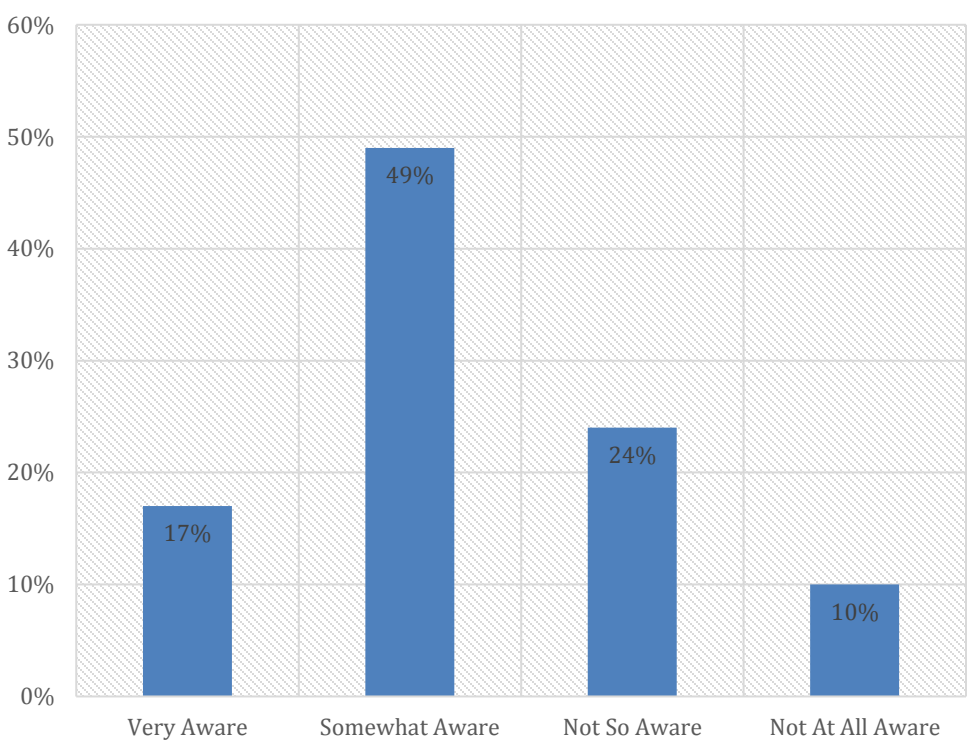
If there were there was an authority or a big name behind a cryptocurrency, as an assurance then they would consider it less unstable and be more interested in using it. The general consensus would be resoundingly positive. Which means if a product was brought to the market with a quality name behind it, people would adopt or embrace the product. Even 35% didn't say no but it is a positive indication that they would adopt the product depending on the name behind the product. If it was a government coming up with such product, those people would have extra motivation and would be even more assured so as to adopt such product.

The complete survey can be found in the link available in Bibliography (Varghese, 2019).

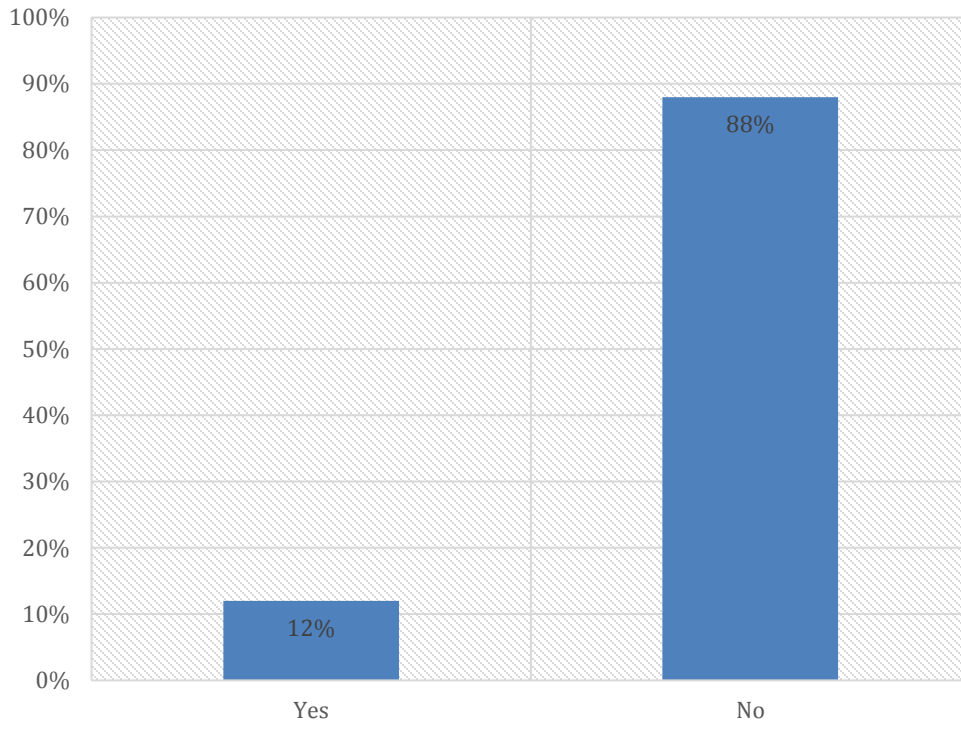
(Figure 7.1.) 1. Age of participants of the research



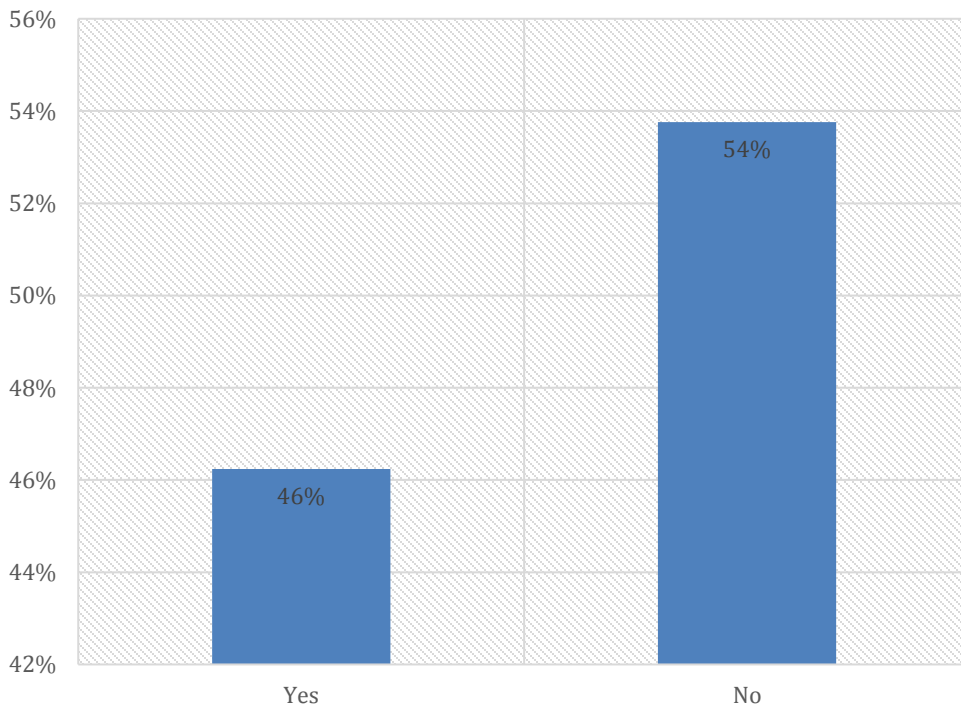
(Figure 7.2.) 2. How aware are you of digital currencies? eg: Bitcoin, Litecoin etc.



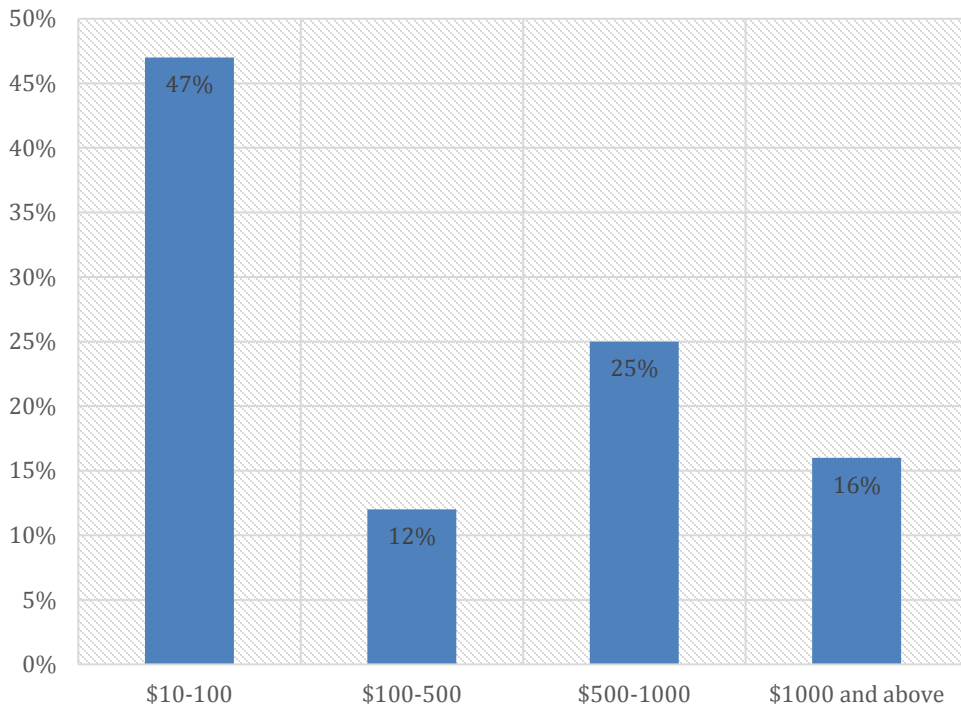
(Figure 7.3.) 3. Do you own any Cryptocurrency?



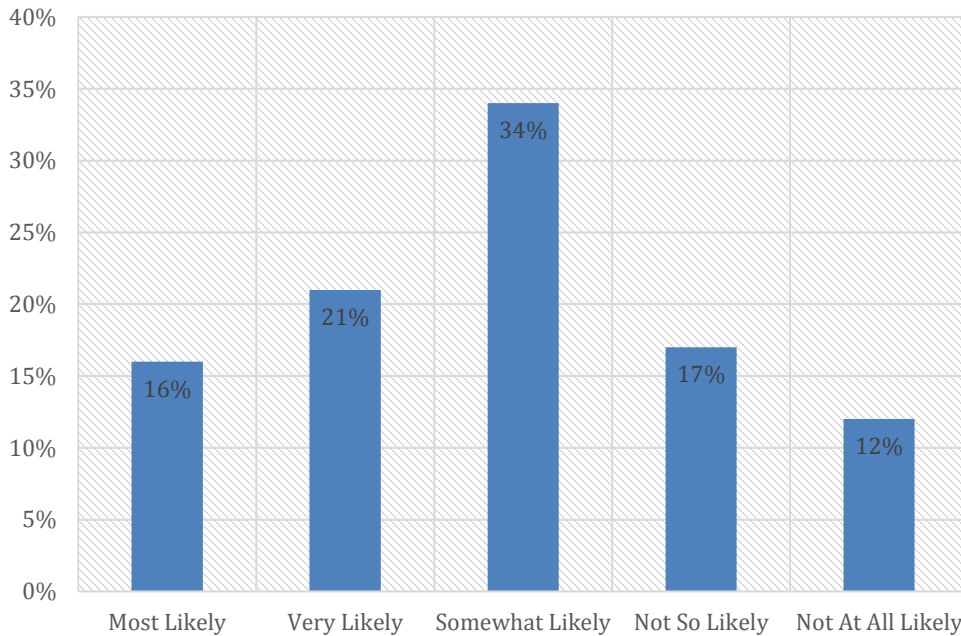
(Figure 7.4.) 4. If NO, is the lack of education on the subject holding you back in adopting it?



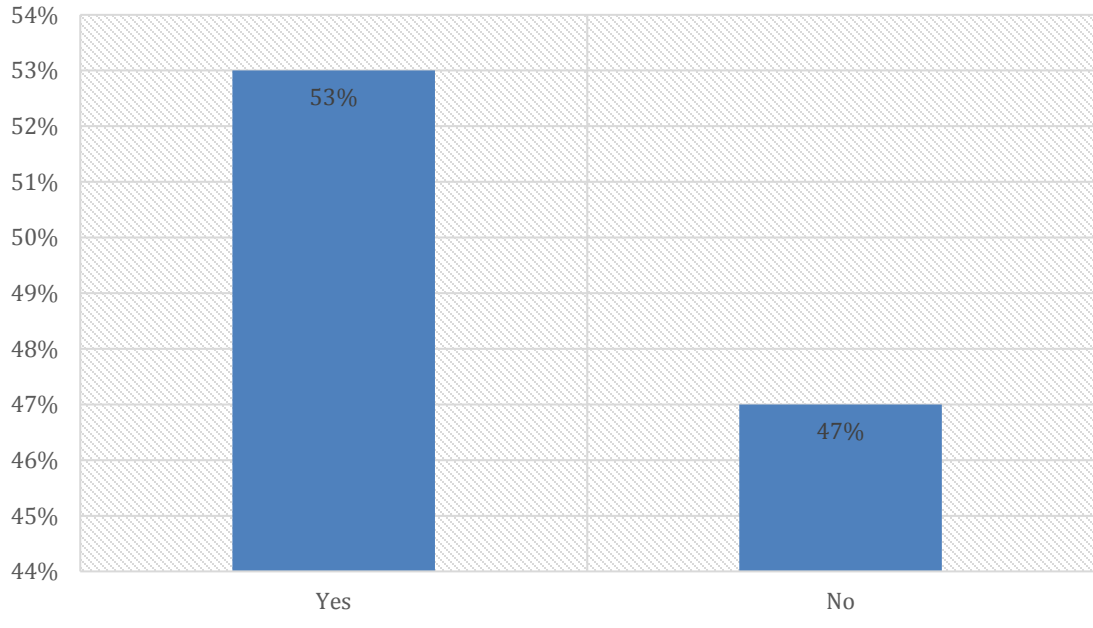
(Figure 7.5.) 5. If 'YES,' how big is the investment?



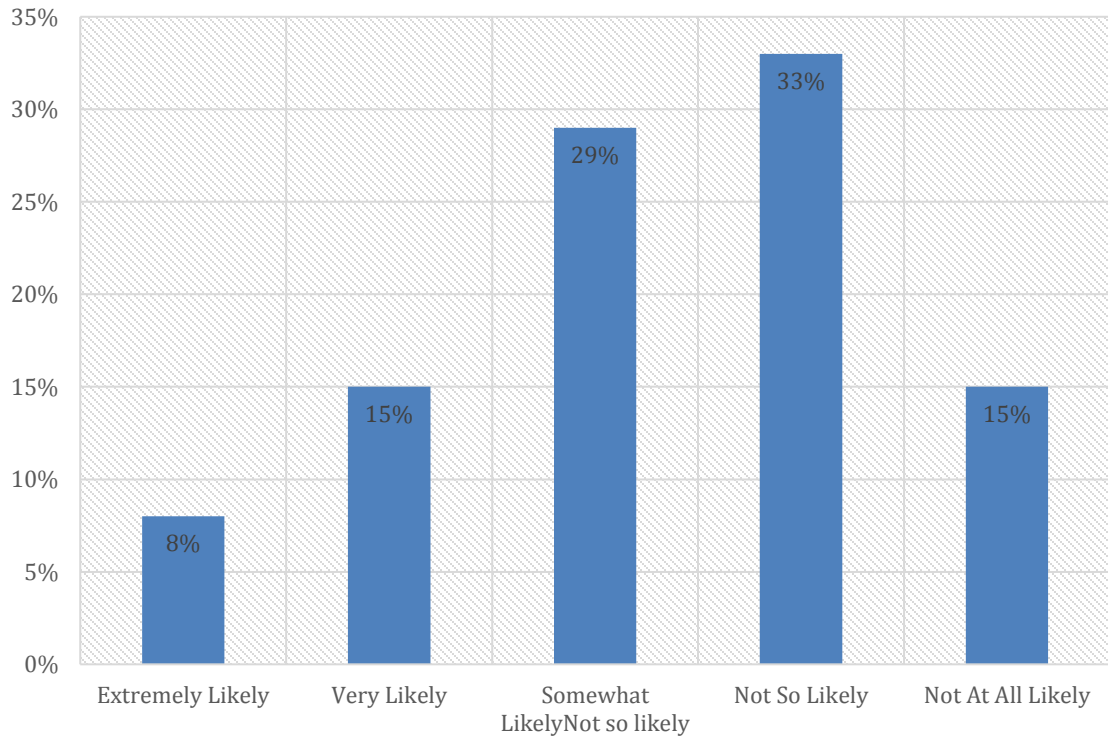
(Figure 7.6.) 6. Cryptocurrency is relatively new and may undergo changes in the near future. Does this affect your decision in using it?



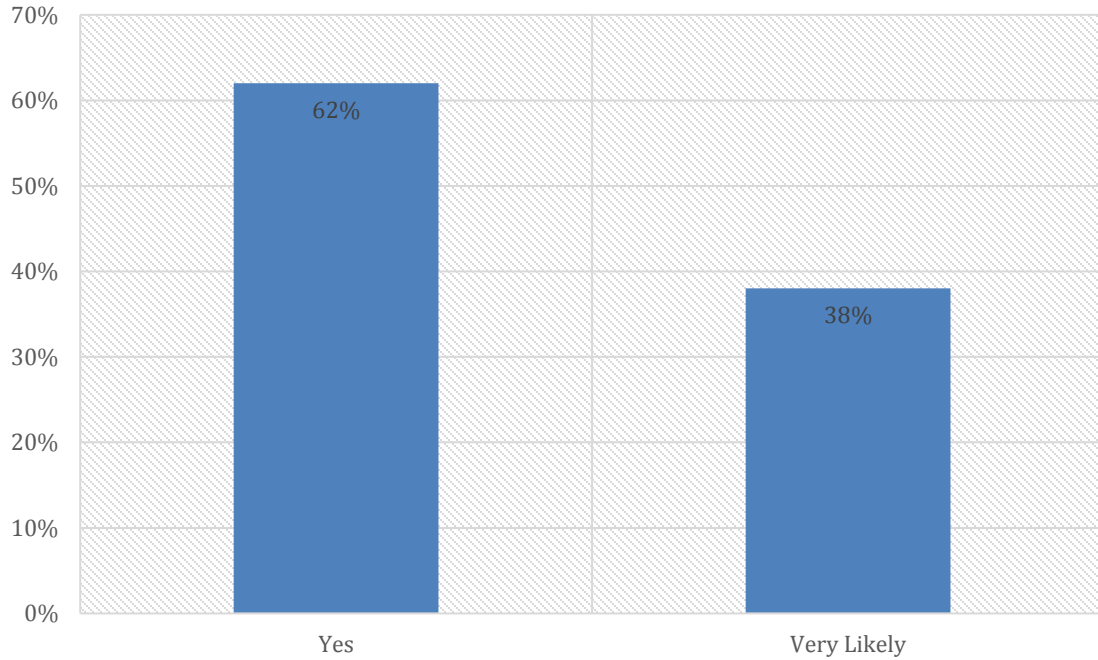
(Figure 7.7.) 7. Cryptocurrency is decentralised which offeres more freedom. Does this attribute attract you in adopting cryptocurrency?



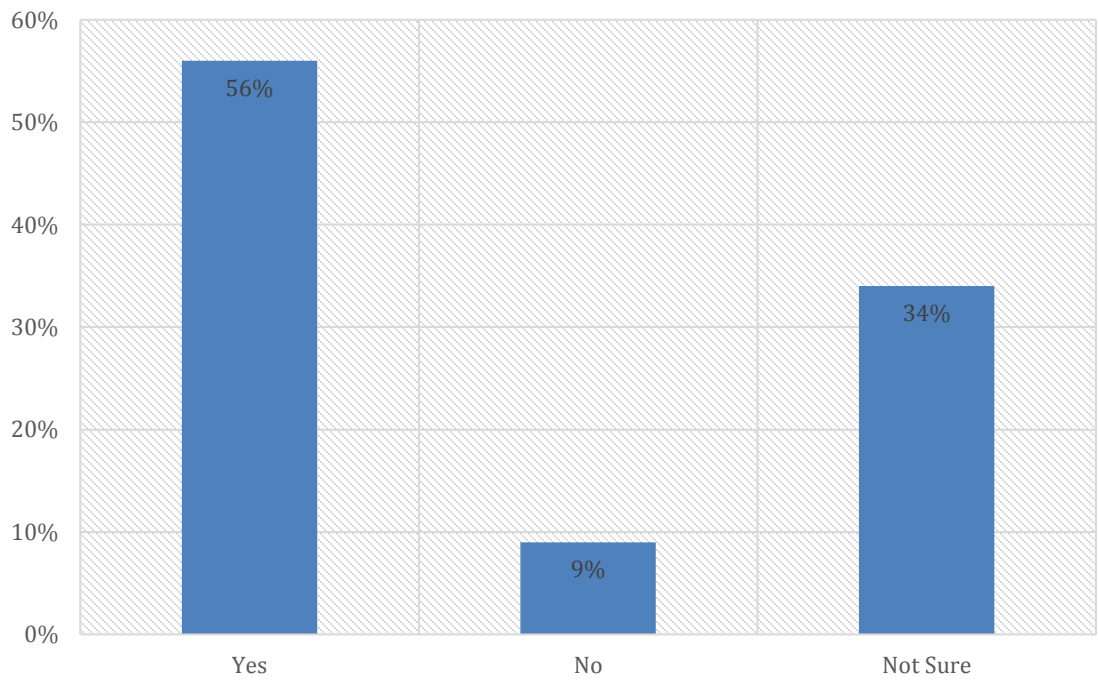
(Figure 7.8.) 8. How likely are you to invest in Cryptocurrency in the near future?



(Figure 7.9.) 9. Unlike traditional banking process, cryptocurrencies process lesser transaction costs. Does this attract you towards cryptocurrency?



(Figure 7.10.) 10. If there were a government regulated cryptocurrency would you be interested in using it?



7.2. SWOT Analysis

<p>Strengths</p> <ul style="list-style-type: none"> Protection against Fraud Accessible to anyone with a smartphone Prevents Identity Theft Cheaper Transaction Fees Decentralized Nature 	<p>Weakness</p> <ul style="list-style-type: none"> Scalability Vulnerable To Hackers Volatile Censorship
<p>Opportunities</p> <ul style="list-style-type: none"> Monetary Democratization Reduced Fraud Process Acceleration and Efficiency New Business/payment Model Access to larger crowd 	<p>Threats</p> <ul style="list-style-type: none"> Censorship Technology failures Politics Institutional adoption barriers

How to overcome Threats and Weaknesses

- Governments could adopt cryptocurrencies which would replace the image of uncertainty and play a major role in building trust among “non-believers”. This would also decrease illegal activity and create a regulatory tent over bad actors. This would also increase competition among other privateers in the market. Emerging cashless societies, for example, Sweden, Kenya and Venezuela would be a prime example for this.
- As more and more people adopt this, the currency would become stable and that would counter volatility.

- Governments would be able to monitor and thwart corruption among institutions by making blockchain based technology mandatory for book keeping.
- Governments could save billions of dollars otherwise lost on traditional ledger process of record keeping. Case in point, Dubai, incorporating blockchain technology in processing documents, dubbed 'Blockchain Strategy 2021,' is touted to save the emirate an expected Dh11 Billion. Also, annually, the country is expected to save 398 million printed documents and 77 million work hours based on this initiative.
- As advancements in technology happens, scalability will be a thing of the past as is now demonstrated by BitcoinCash(BCH).
- A combination of online and offline keys would be the best way to combat hackers.

8. Conclusions and Recommendations

While assessing whether cryptocurrencies can potentially transform into mainstream use and replace traditional currency worldwide in this report, we look into the oppression faced by the crypto community. The worldwide adoption of cryptocurrency is the next logical step to ease the growing discord in the global economy. The next step of making it a real-world payment system is by considering steps that would help cryptocurrencies achieve this. The question to be asked is whether a day will come when crypto-assets or coins would eventually not be measured in traditional FIAT currency. This will take effect only with the everyday use and when cryptocurrencies transpire into something from its current state of being a trading commodity in the financial markets or being a currency to bypass economic sanctions.

From Chapter 3, it is clearly understood that the benefits of adopting cryptocurrency as an alternate currency has many benefits. In spite of this people are still not confident of adopting cryptocurrencies as an alternate currency as they put their faith in traditional money. These socio, economic, political challenges are highlighted and described in the chapter Building Trust in Cryptocurrency, such as; Privacy and Trust with Venezuela's case as an example, Regulation and Reputation, Volatility, Incentivizing such adoption where governments could play a major role, Ease of use and adoption.

To build trust in a product is a daunting task and in the enigmatic world we live in, that should be the main goal behind the product launch. The product needs to be easy to deal with, easy to carry, easy to transfer, recognizable and verifiable for it to work as a payment system. Looking at the financial market for example, many of the items we trade or act as a store of wealth are not easily transferable or carried. Here, crypto-assets present themselves as an excellent alternative. One of the main reasons that a government should adopt bitcoin or make their own cryptocurrency is because the money saved on excessive fees and exchanges would end up with the consumer and will be circulating in the economy. Which means the country gets richer and more spending power for the consumer.

Based on the results of the survey, it is clear that people in general are aware of cryptocurrencies but are coy to adopt it because they don't trust in it. Government can play a major role in increasing trust and curing anxiety among people as made clear from the data tabulation. The genuinely innovative technology is the underlying technology called blockchain. This new technology has the power to reshape industries as well as obliterate corrupt business models and provide transparency.

Recommendations

- The **Best way to implant trust** is when a reliable big name is attached to the project or the coin offering. For example a government, or a major conglomerate in the business field with a reputable name would be a major deciding factor for sceptics even though the idea of decentralization is absent.
- By adopting cryptocurrency, **central banks could reduce interest rates** by more than what is currently possible and stabilize economic activity more quickly in a recession, reducing the need for other non-conventional measures.
- Setting a **Value-Based price strategy**, where customer can achieve a highly competitive pricing when compared to traditional financial services, blockchain based FinTech startups can deliver a customer an unrivaled experience when compared to traditional banking services.
- In an increasingly cashless society, **creating products using blockchain technology** would help the banking industry adapt and sustain with the times and help to establish transparency and further grow trust factor in existing customers as well as attract new. For example: Creating products using Smart Contracts. These can be used to vet merchants and pay only if the conditional criteria have been met.
- One of the **best way to market your BTC or any crypto coin** is building a community around it and promoting your crypto-coin there. As we discussed the Remittance market is ripe where consumers can benefit from several products using the blockchain technology. For example: Reddit, Social media websites.

- **Determining the U.S.P. of a product** determines enables us to find the right market segment and set an appropriate pricing. Considering the benefits offered by xRapid over others, they offer lightning quick transactions and next to nothing costs on their platform. This is their Unique Selling Point. Avoiding the middle men, services like xRapid and Rebit, helps their overseas Filipino worker base cut transaction costs and fast transactions.
- To **counter volatility while sending money overseas using cryptocurrencies**, the best way is to opt for a futures contract which is a legal agreement and locks down the price of the exchange at a certain time and wouldn't fluctuate with the anomalies in the market. This promotes peace of mind and stability. Educating consumers further on this would be a catalyst in growing trust.

9. Bibliography

Books

- B.S. Tan, K. L. *Bitcoin: Its Economics for Financial Reporting, Australian Accounting Review*, Vol. 27(2): 220-227, 2017. (2015).
- Behr, P. &. The German Banking System. In *The Palgrave Handbook of European Banking*. DOI:10.1057/978-1-137-52144-6_21. (2016).
- Bergier, J. *From the 15th Century in Italy to the 16th Century in Germany: A new Banking Concept. in The Dawn of Modern Banking, The Centre for Medieval and Renaissance Studies*. Los Angeles: University of California. (1979).
- C.R. McConnell and S.L. Brue. *Economics*. (1996) McGraw-Hill, Inc. New York.
- Dixon, S. *Bank to the Future: Protect your Future before Governments Go Bust*. Searching Finance Ltd. (2012).
- Dryja, J. P. *White Paper- The Bitcoin Lightning Network: Scalable Off-Chain Instant Payments*. (2016).
- E. SHEARER, J. G. *News Use Across Social Media Platforms 2017*. Retrieved from Pew Research Center - Journalism & Media: News Use Across Social Media Platforms (2017).
- Foote, C. W. "Economic Policy and Prospects in Iraq.". *Journal of Economic Perspectives*, 18 (3): 47-70. doi:10.1257/0895330042162395. (2004)
- Gilbart, J. W. *The History, Principles And Practice Of Banking*. 1919. George Bell And Sons.
- Grinberg, R. *Bitcoin: An Innovative Alternative Digital Currency*. Hastings Science & Technology Law Journal. (2011)
- I. Fischer. *The Purchasing Power of Money. Its Determination and Relation to Credit Interest and Crises*. 1911. Cosimo Classics.
- Jevons, W. S. *Money and the Mechanism of Exchange*. Cornell University Library. (1875).
- Mankiw, N. G. *Macroeconomics (6th ed.)* (Vol. 6). New York: Worth Publishers. (2007).
- Röscher, W. *Grundlagen der Nationalökonomie*, 25th ed. Stuttgart and Berlin: J. G. Cotta'sche Buchhandlung Nachfolger. (1918).
- W.J. Baumol and A.S.Blinder. *Economics; Principles and Policy* (1988). Harcourt Brace Jovanovich, Publishers. San Diego.
- Williams, M. T. *Uncontrolled Risk: Lessons of Lehman Brothers and How Systemic Risk Can Still Bring Down the World Financial System*.(2010). McGraw-Hill Education.

Websites

- AKOLKAR, B. (2018). *Davos 2018: Leaders Remain Critical About Cryptocurrencies at the World Economic Forum*. Retrieved from CoinSpeaker.com:
<https://www.coinspeaker.com/davos-2018-leaders-remain-critical-cryptocurrencies-world-economic-forum/>
- Andresen, G. (2011). *Re: Labor costs and prices in an economy using bitcoin exclusively, BITCOIN FORUM*. Retrieved from BITCOIN FORUM:
<https://bitcointalk.org/index.php?topic=4724.msg69032#msg69032>
- Antonopoulos, A. (2016). The Joe Rogan Experience #844 - . (J. Rogan, Interviewer)
Retrieved from <https://www.youtube.com/watch?v=1sOxtBiBpE4>
- B.S. Tan, K. L. (2015). *Bitcoin: Its Economics for Financial Reporting, Australian Accounting Review, Vol. 27(2): 220-227, 2017*.
- barbarousrelic. (2011). *Would you support moving to a system with controlled [sic] inflation?, BITCOIN FORUM*. From BITCOIN FORUM:
<https://bitcointalk.org/index.php?topic=4940.msg72218#msg72218>
- Behr, P. &. (2016). The German Banking System. In *The Palgrave Handbook of European Banking*. doi:10.1057/978-1-137-52144-6_21.
- Bergier, J. (1979). *From the 15th Century in Italy to the 16th Century in Germany: A new Banking Concept. in The Dawn of Modern Banking, The Centre for Medieval and Renaissance Studies*. Los Angeles: University of California.
- Bitcoin Price Index - Real-time Bitcoin Price Charts*. ((2018)). From Bitcoin Price Index:
<https://www.coindesk.com/price/bitcoin>
- Dixon, S. (2012). *Bank to the Future: Protect your Future before Governments Go Bust*. Searching Finance Ltd.
- Dryja, J. P. (2016). *White Paper- The Bitcoin Lightning Network: Scalable Off-Chain Instant Payments*. PDF.
- ELISA SHEARER, J. G. (2017). *News Use Across Social Media Platforms 2017*. Retrieved from Pew Research Center - Journalism & Media: News Use Across Social Media Platforms 2017
- Emem, M. (2018). *Jack Ma Launches Blockchain Money Remittance to Philippines, Bashes Bitcoin [Again]*. From CCN: <https://www.ccn.com/jack-ma-launches-blockchain-money-remittance-to-philippines-bashes-bitcoin-again>
- Fadilpašić, S. (2018). *Gold for Muslim Investors is a New Tactic for Crypto Traders*. From cryptonews: <https://cryptonews.com/news/gold-for-muslim-investors-is-a-new-tactic-for-crypto-traders-1539.htm>
- Financial Action Task Force(FATF). (2014). *Financial Action Task Force*. From Virtual Currencies: Key Definitions and Potential AML/CFT Risks: <https://www.fatf-gafi.org/media/fatf/documents/reports/Virtual-currency-key-definitions-and-potential-aml-cft-risks.pdf>
- Financial Action Task Force(FATF). (2015). *Financial Action Task Force, Guidance for a Risk-Based Approach to Virtual Currencies*. From fatf-gafi.org: <http://www.fatf-gafi.org/publications/fatfgeneral/documents/guidance-rba-virtual-currencies.html>

- finder.com.au. (2018). *Finder Australia*. From Compare the best cryptocurrency wallets:
<https://www.finder.com.au/cryptocurrency/wallets>
- Foote, C. W. (2004). "Economic Policy and Prospects in Iraq.". *Journal of Economic Perspectives*, 18 (3): 47-70. doi:10.1257/0895330042162395
- Frisby, D. (2018). *Wealth inequality is soaring – here are the 10 reasons why it's happening*. From theguardian.com:
<https://www.theguardian.com/commentisfree/2018/apr/12/wealth-inequality-reasons-richest-global-gap>
- Glocks, T. (2018). *CoinTrust.com*. Retrieved from Bitcoin Cash Celebrates Anniversary With 687,000 Transactions: <https://www.cointrust.com/news/bitcoin-cash-celebrates-anniversary-with-687000-transactions>
- Government, U. (2011). *Treasury*. From Legal Tender Status:
<https://www.treasury.gov/resource-center/faqs/Currency/Pages/legal-tender.aspx>
- Grinberg, R. (2011). *Bitcoin: An Innovative Alternative Digital Currency*. Hastings Science & Technology Law Journal.
- Hanyecz, L. (n.d.). *Bitcoin Forum > Economy > Marketplace > Pizza for bitcoins?* From Bitcoin Forum: <https://bitcointalk.org/index.php?topic=137.0>
- How Many Bitcoins Are There Now in Circulation?, Buy Bitcoin Worldwide*. (2019). From Buy Bitcoin Worldwide: <https://www.buybitcoinworldwide.com/how-many-bitcoins-are-there/>
- Hulleman, M. (2017). *Bitcoin Is A Deflationary Currency: What Does It Mean?* Retrieved from investinblockchain.com: <https://www.investinblockchain.com/bitcoin-is-a-deflationary-currency/>
- Javed, A. (2018). *Bitcoin draws calls for more regulation at Davos*. Retrieved from The Telegraph/ Business: <https://www.telegraph.co.uk/business/2018/01/25/bitcoin-draws-calls-regulation-davos/>
- Jevons, W. S. (1875). *Money and the Mechanism of Exchange*. Cornell University Library.
- jon_smark. (2011). *Topic: When the majority decides to change the rules*. Retrieved from BITCOIN FORUM: <https://bitcointalk.org/index.php?topic=4740.0>
- KENTON, W. (2017). *Network Effect*. Retrieved from Investopedia:
<https://www.investopedia.com/terms/n/network-effect.asp>
- Khan, A. (2015). Bitcoin – payment method or fraud prevention tool?
- Kyle. (2018). *First remittance (AlipayHK in HK <-> GCash in Philippines) within 3 seconds*. From 8btc: <https://www.8btc.com/article/225868>
- Lin, L. (2018). *Stellar First DLT to Obtain Sharia Certification for Payments & Asset Tokenization*. Retrieved from Stellar News: <https://www.stellar.org/blog/stellar-receives-sharia-compliance-certification-transfers-tokenization>
- Mesropyan, E. (2016). *39% of the World's Population Does Not Have a Bank Account*.
- Varghese, J. (2019). *Sruvey Results*. From Survey Monkey:
<https://www.surveymonkey.com/results/SM-W6JHPTSPV>