

The Future of Bitcoin

ABDOURAHMAN ROBLEH DIRIR

PhD Student in School of Accounting, Dongbei University of Finance and Economic

Dr. ALIREZA NASIRI

PhD in Management Science and Engineering, University of Tehran

Abstract

Evolved by way of an anonymous programmer, Bitcoin is a global cryptocurrency and a machine for virtual currency. The transactions take location immediately among the users minus any intermediaries. Bitcoin is an awesome mode of exchange whilst in comparison to traditional banks. Those transactions are verified through network nodes and recorded in a public dispensed ledger called blockchain. The price of bitcoins are volatile i.e. they could unpredictably boom or lower over a quick time period. They are taken into consideration excessive-danger assets whose transactions can simplest be refunded and not reversed. The bitcoin came into life in January 2009, with Satoshi Nakamoto mined the primary block of bitcoins ever. Given that then, some of supporters engaged in transactions and acquired bitcoins. International locations round the world started out accepting bitcoin as a legitimate mode of currency like the United States. However, some countries like Djibouti haven't legalized yet the usage of this foreign money due to some of reasons. The targets of this paper are to understand the awareness about the existence of bitcoins, to evaluate the perception of bitcoin as the future currency and to research the possibility of legalization of bitcoins in Djibouti.

Keywords: Bitcoin, cryptocurrency, decentralized, experimental, legalization, security.

1. Introduction

Era has being the prima influencer; humankind ought to be geared up for the unpredicted. While bills and buying inverted virtual and but earlier the economic company started scaling it as the biggest sport changer, there has been statistics around approximately currency inverting virtual. Nicely this is going to be shown that modern innovation and era advancements may be a strong source of development and also these intelligence brains on this planet must continuously be prepared for with open eyes to reason a change. A cryptocurrency¹, a virtual currency in which encryption techniques are used to adjust the technology of units of currency and affirm the switch of price range, running independently of a relevant financial institution."Decentralized cryptocurrencies² such which includes bitcoin now offer an outlet for non-public wealth that is past limit and confiscation". "As bitcoin profits ground, extra companies have commenced accepting the cryptocurrency". This mysterious currency so called Bitcoin³, each a digital asset and a currency system invented by using Satoshi Nakamoto, who published the discovery in 2008 and launched it as open-source software in 2009. The device is peer-to-peer; users can transact directly without a middleman. Transactions are verified by way of network nodes and recorded in a public disbursed ledger called the blockchain. Its miles extensively established as more human beings include the digital money. But it isn't always without controversy. The cryptocurrency is still a novel concept and the world is split on whether it's a boon or bane of technology. On the grounds that then it derives its monetary price from a "network impact", that is, the more people who use Bitcoin the extra valuable the entire Bitcoin environment turns into, it's far predicted that transaction pastime is connected with Bitcoin currency adjustments. The rest of the paper is structured as follows. Section three describes the Bitcoin records used and methodological approach. Section four discusses the empirical results. Finally, phase five concludes.

2. Literature review

During the last years, the recognition of Bitcoin and other cryptocurrencies has inflated, consigning the difficulty and arguments past validity and placed into the media spotlight, finance, and commercial enterprise. Cryptocurrencies are digital currencies without a bodily shape that perform on a peer-to-peer basis without a government which include the Federal Reserve. They may be virtual in that unlike American dollar, they don't have any physical form and do not have a vital repository. Bitcoin has skilled a meteoric upward push in reputation given that its creation in 2009 (Nakamoto, 2008). At the same time as digital currencies had been proposed as early because the 1980s, Bitcoin became the first to seize on. The whole cost of all bitcoins in stream nowadays is around \$28 billion, and it has inspired rankings of competing cryptocurrencies that observe a comparable layout. Bitcoin and most other cryptocurrencies do not require a government to validate and settle transactions. As a substitute, those currencies use handiest cryptography (and an internal incentive machine) to

¹ <https://en.wikipedia.org/wiki/Cryptocurrency>

² [https://en.oxforddictionaries.com/Decentralized cryptocurrencies](https://en.oxforddictionaries.com/Decentralized_cryptocurrencies)

³ <https://en.wikipedia.org/wiki/Bitcoin>

control transactions, control the supply, and save you fraud. Bills are verified by using a decentralized community. As soon as showed all transactions are stored digitally and recorded in a public “blockchain,” which may be thought of as an accounting machine. A recurrent theme in nascent empirical literature in search of two version Bitcoin rate conduct is that such prices appear indifferent from economic basics and, therefore, won't be entirely rational (Pieters and Vivanco, 2017; Nadarajah and Chu, 2017; Katsiampa, 2017). However, regardless of its high price volatility in relation to traditional belongings or currencies, a growing range of traders are investing in Bitcoin and the usage of it to conduct transactions.

Many factors will have an impact on Bitcoin's evolution, such as law, technological innovation, and monetary situations. Predicting the destiny of Bitcoin nowadays resembles what it has to have been like to try to understand the importance of the internet within the Nineteen Nineties. A few experts, including Ray Kurzweil in his e-book “The Age of intelligent Machines”, first posted in the late Nineteen Eighties, were given it spectacularly proper. But others, like Paul Krugman, who in 1998 predicted that the internet's effect on the economy would be no more than the fax machines, were dead incorrect, although for comprehensible motives. Timelines for the adoption and extension of new technology are inherently unpredictable, on the whole due to the fact their closing effect could be an end result of ways human beings have interaction with them. Bitcoin's future can satisfactory be understood via considering scenarios that represent a number viable consequences.

Three attributes of bitcoins that had to be analyzed in my view are determined via Authors Joseph Bonneau, Andrew Miller, Jeremy Clark, Arvind Narayanan, Joshua A. Kroll and Edward W Felten, in their paper 1. They believe that “bitcoin is an unprecedented case where in practice appears to be ahead of idea” due to the fact until now there isn't a systematic model to reply questions associated with bitcoin. Itay Eyal, Adem Efe Gencer, Emin Gun Sirer and Robbert van Renesse assessed the efficiency of the blockchain protocols 2. “It is feasible to enhance the scalability of blockchain protocols to the factor in which the community diameter limits consensus latency and the character node processing power is the throughput bottleneck.”³ concluded by way of authors Juan A Garay, Aggelos Kiayias and every other authors Nikos Leonardos said about the safety fashions of bitcoin. Creator Gregory Maxwell offered his studies “private Transactions” (2015) regarding the strategies that users can use to hide the amount in their bills from the public using novel cryptographic strategies.

To understand the concept of bitcoins better, it's miles important to recognize how bitcoins are used. Firstly, the consumer has to download a web wallet which includes Blockchain address. They can look for compatible wallets on websites like Bitpay.Com. Once they make their preference, they need to download it on each single one in each of their devices; it doesn't get downloaded on all of them mechanically. This is one characteristic that makes the use of bitcoins difficult. The customers are not linked to their financial institution account like other techniques of online price. Rather, customers have to purchase bitcoins earlier and store them for using them in transactions. They can seek advice from the conversions of every currency kind to know how much they should buy. If the customers do not download an app that sells bitcoin, they have to use another method. As soon as the device has been setup, the payment may be made in the following methods: If the wallet app and the bill are within the identical device, then choose “Open in wallet” acting at the invoice, if they may be on two one-of-a-kind gadgets, use the wallet app to test the QR code on the invoice and if the code cannot be scanned, enter the code deal with manually and make the charge.

The number one cause why people are making an investment in bitcoins is due to the fact they do no longer need authorities interference; they need complete manage of their capital. These days, corporate giants like Microsoft, Wal-Mart and many others receive bills in bitcoin. It is miles the reserve foreign money for all different cryptocurrencies i.e. any normal foreign money first must be transformed into a bitcoin after which exchanged for the opposite sorts. Bitcoins are held in two methods: The consumer shops the keys to their bitcoins in a pockets on their hard power or a third party pockets service plays this characteristic for them. The primary option may be dangerous if the tough drive fails or due to any mistakes or malicious software program, unless we've got an excellent backup system. The second alternative is not safe both due to the fact they're prone to security failures as properly. It is also essential to make certain that the operators of the bitcoin wallet are straightforward and are not fraudulent. There have been a number of cases where in the operators of bitcoin financial establishments have misplaced patron finances due to alleged security breaches. In context to the above, the targets for this paper are seeking; to recognize the awareness about the life of bitcoins, to assess the perception of bitcoin as the destiny currency and to investigate the opportunity of legalization of bitcoins in Djibouti.

3. Methodology

This research paper has been sourced from primary data collected through surveys. A secondary record is compiled from newspaper articles together with the references from various studies article and licensed

¹ “Research Perspectives and Challenges for Bitcoin and Cryptocurrencies” (2015).

² “A Scalable Blockchain Protocol” (2015).

³ “The Bitcoin Backbone Protocol” (2017).

magazine publications. A nicely-structured questionnaire including closed ended questions is used to acquire 166 responses via adopting random sampling approach. Attention approximately the life of bitcoins and perception of bitcoin because the future currency is measured with a five factor likert scale starting from “1: strongly disagree to five”. To look at the demographic profile of respondents, descriptive analysis in phrases of frequency and percent is used for summarizing. The difference between demographic profile of respondents and attention about the lifestyles of bitcoins and perception of bitcoin as the destiny foreign money is tested via ANOVA (evaluation of Variance).

The demographic profile of respondents in terms of their gender, age, education and occupation was analyzed and the results are presented in Table 1. The total pattern size selected for the have a look at and evaluation is 166. At the same time as fifty one percent of the responders have been men, the last 48.7% had been ladies. Many of the 166 responders, almost 108 of them belonged to the age group of 18 – 35 and 21.7% had been among 35 – fifty five years. 65% of them had been graduates at the same time as 19% were submit-graduates. 98 responders were college students, 33 have been hired, 17 have been related to enterprise and 13 have been professionals.

Table 1. Demographic Profile of Sample Respondents

Demographic Profile	Frequency	Percentage
Gender		
Male	85	51.2%
Female	81	48.8%
Age		
Less than 18	18	11%
Between 18 – 35	108	65%
Between 35 – 55	36	22%
55 and above	4	2%
Education		
Intermediate	13	8%
Graduation	108	65%
Post Graduation	33	20%
Occupation		
Student	98	59%
Employed	33	20%
Business	17	10%
Professional	13	8%
Others	5	3%
Total	166	100%

The objective of the research is to apprehend the attention of the lifestyles of bitcoins as digital currency. It's far observed that best sixty three. 9% of the respondents are privy to its existence. The primary sources of facts are newspapers, journals, buddies and circle of relatives and many others.

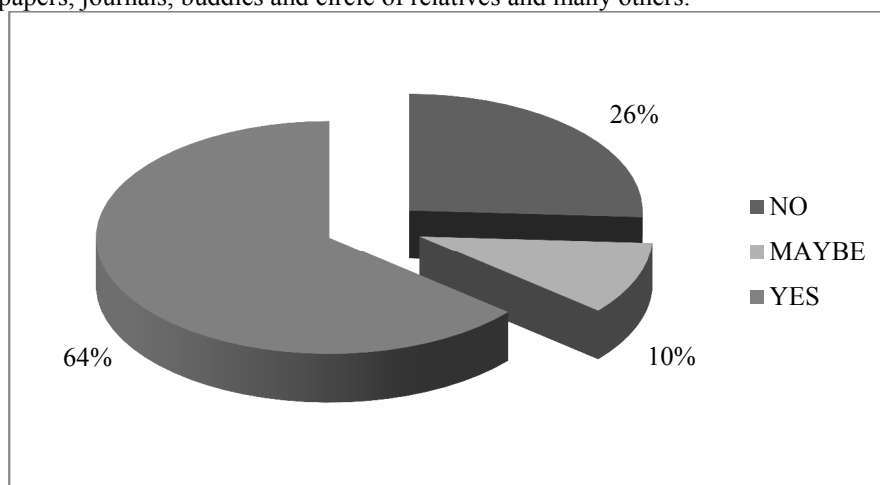


Figure 1: Pie chart showing awareness of bitcoin as a virtual currency

Whilst figuring out the perception of those human beings concerning bitcoin, it became determined that a majority of them recall it to be person-pleasant, secure, and reliable and additionally a robust future investment. But, while requested approximately their opinion on legalizing bitcoins in Djibouti, an equal percentage of

human beings (39.2%) voted for “sure” and “maybe” as proven in Figure 2. This suggests that even though human beings think bitcoins are advantageous in some approaches, they're now not too sure approximately the results of it being a criminal currency. Hence, it is vital for the authorities to offer certain recommendations approximately the operations of Bitcoins and their legality.

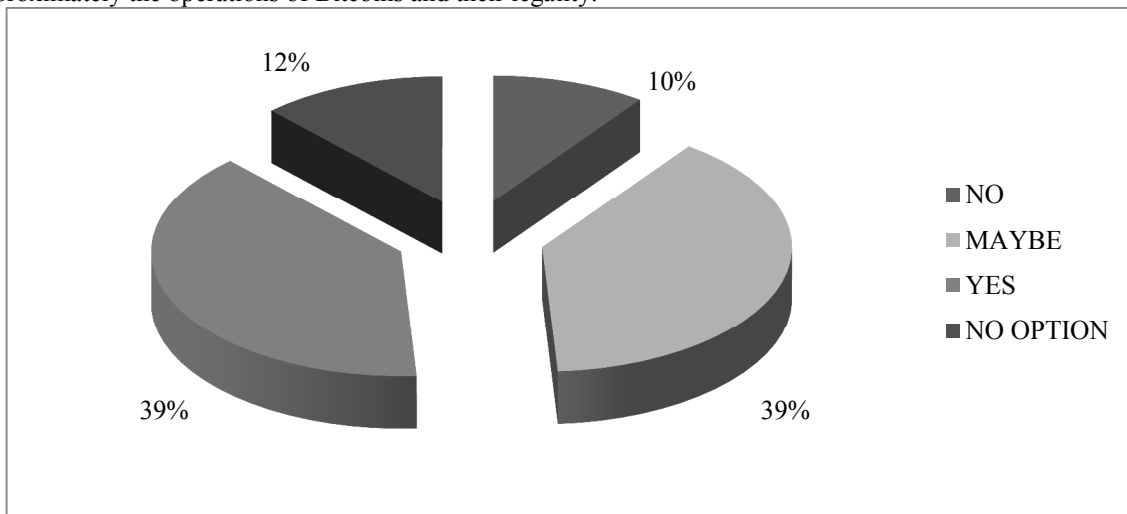


Figure 2: Pie chart showing probability of legalization of bitcoins in Djibouti

A one-way ANOVA take a look at is conducted to examine the attention and notion of bitcoin with the age, gender, education and career of the humans. Via ANOVA (analysis of Variance) the distinction among the demographic profile of the respondents and the awareness of bitcoins has been analyzed and the effects were presented within the Table 2 under. There is a sizeable difference of cognizance of bitcoin and their gender and education, with F values 2.1 and zero. Seventy four respectively and $p < 0.05$ respectively. However, there is no significant difference between their age and occupation and their awareness with F values 1.08 and 1.06 respectively, $p > 0.05$.

Table 2: ANOVA between Awareness of Bitcoin and Demographic Profile of respondents

		Sum of square	F values	Mean square	F values	Significance
Age	Between groups	1.486	0	0.495	1.087	0.355
Gender	Between groups	0.996	1	0.996	2.199	0.040
Education	Between groups	1.025	3	0.341	0.745	0.026
Occupation	Between groups	1.940	0	0.485	1.065	0.375

The analysis became additionally carried out to investigate the distinction among the demographic profile of the respondents and their notion of bitcoins among them. There's a vast difference among the perception of bitcoin and age of the respondents, $p < 0.05$. Similarly, there's significant difference between the belief of bitcoins and their schooling and career with F values 1.5 and 3.8 respectively and $p < 0.05$. However, the gender of the people and their perception do not show significant difference with F value 0.44, $p > 0.05$. The consequences of the analysis are provided in Table 3.

Table 3: ANOVA between Perception of Bitcoin and Demographic profile of respondents

		Sum of square	F values	Mean square	F values	Significance
Age	Between groups	0.430	0	0.143	0.832	0.040
Gender	Between groups	0.187	0	0.187	0.447	0.504
Education	Between groups	1.889	0	0.629	0.524	0.010
Occupation	Between groups	0.968	0	0.492	0.822	0.005

4. Result

Transactions are nevertheless taken into consideration unsecure as the costs of bitcoins are not strong they could increase or decrease over a quick span. Transactions made using bitcoins cannot be reversed; the man or woman receiving the cash can most effective refund them. So except we're transacting with familiar and truthful people, cash sent from our account has no guarantee. For the reason that all bitcoin transactions are saved on its network, everybody can advantage get admission to view transactions and balances behind a key address. Though, the identity of the person behind a specific bitcoin cope with remains hidden so long as the user doesn't reveal the statistics himself. However bitcoins are a massive hit, especially with countries like Japan and Russia, who've legalized using this cryptocurrency. Transactions for buy and sale are made via bitcoins on digital wallets like blockchain wallet. But, the scenario in Djibouti is truly different. The government of Djibouti has no longer formally legal the use of Bitcoin regardless of its large demand by means of the humans. Djibouti's apex

banking group i.e. The Reserve bank of Djibouti has warned the users, holders and buyers of cryptocurrencies against potential dangers regarding the safety and finance. "The introduction, trading or usage of VCs consisting of Bitcoins, as a medium for currency isn't authorized with the aid of any primary financial institution or economic authority. No regulatory approvals, registration or authorization is said to be obtained by using the entities concerned for carrying on such sports," the significant financial institution had said. The truth that the authorities are resilient to bitcoin has led to the latter gaining loyalty from human beings concerned in suspicious sports like playing or dealing in tablets. The in addition the era develops, the more could be the range of folks that use bitcoin as a money-laundering mediator.

Whilst countries like China enforced control over bitcoin exchanges, first of all there was an amazing fall in its rate but soon, it shot up. It is miles not possible for the authorities to remove bitcoins for the motive that the blockchains exist and are copied all over the internet. Consequently, rather than banning dealers, the authorities ought to offer hints for the operation of bitcoin exchanges due to the fact positive customers will nevertheless want to buy them and so will flip to overseas exchanges. In its process of setting up a regulatory framework for the cryptocurrencies, the authorities of Djibouti determined to discover the citizens' opinion. They sought to know what the general public desired banning, regulating or gazing bitcoins and the way. And in a rustic that has people of different traits, it might not be surprising to recognize that even as half the use of a supported law, the rest voted to prohibit. Those who supported regulation believed that this will boost the Djibouti financial system while the fighters thought it would be perilous.

If the bitcoin network efficiently geared toward disrupting the monetary zone, bitcoin might certainly be soon a thing of the past. However, it's far plenty greater possibly that bitcoin remains a spot product. Regulation is potentially a task in this scenario. The cryptocurrency does now not without a doubt match into existing styles. As mentioned above, it's miles doubtful whether or not bitcoin maximum carefully resembles a security, a currency, a commodity, or a new asset. This may make regulation greater hard. Any law efforts will run into the trouble that global, decentralized foreign money can virtually move from one jurisdiction to some other. In reality, such migration has already taken vicinity within the US. In 2014, well-supposed law in the kingdom of recent York triggered bitcoin exchanges to move to different US federal states. And strict countrywide law will truly make the bitcoin infrastructure circulate to different countries. Introducing global guidelines, as an instance on the G20 level, is probably tough because the countries are already pursuing different regulatory tactics. Canada and Japan, as an instance, appear like leaning toward bitcoin pleasant law.

Similarly, uniform regulation on the G20 level would possibly clearly bring about the bitcoin infrastructure being shifted to smaller international locations. For instance, Switzerland and Iceland provide bitcoin-friendly surroundings, too. Numerous Swiss cantons already accept tax payments in bitcoin. Furthermore, Switzerland has installed a "crypto valley" at Zug, where programmers work on cryptocurrencies and blockchain technology. Iceland is the home of principal bitcoin miners. Although the government agreed on a worldwide framework for bitcoin law sooner or later within the destiny, the implementation will provide upward thrust to issues just take into account the efforts to harmonize international marketplace and tax regulations. This leads us to 4 conclusions. First, there are certainly regulatory dangers that have an effect on the bitcoin charge. 2nd, bitcoin is in all likelihood to live on for the foreseeable future because it could take gain of various country wide law concepts and methods. Third, it will be difficult to plot and put in force strict and uniform worldwide regulation, as several international locations pursue a bitcoin-pleasant approach. Fourth, a bitcoin community which aimed to disrupt the present day market shape would in all likelihood attain the alternative and speedy cause the regulatory give up of bitcoin.

If the government legalizes Bitcoins, taxes might be levied on traders and the returns from their investments. Professionals just like the CEO of blockchain, accept as true with that in spite of their drawbacks, customers will increase approaches to make sure the protection of bitcoins and that they may additionally be the maximum outstanding method of currency in destiny.

5. Conclusion

What bitcoin can do day after today is in some ways even greater vital. The blockchain can be used for a huge sort of transactions: smart contracts, authentications, micropayments, and so on. There's an argument that the reason for advertisements at the internet is that customers can't make micropayments whilst visiting a website. In truth, internet browsers have errors (403 Forbidden) that basically manner, "you did no longer pay me to come back to my website." I do now not suppose that commercials will always depart if micropayments end up feasible, however those commercials were evolved as a way to monetize the net due to the fact there was now not a reliable price gadget. But virtual pockets ought to easily be used to pay small amounts, amounts so small that they may not even are considerable due to the fact they are fractions of a bitcoin. Think about what this may allow. Some gadgets can probably be moved thru the blockchain right now. It isn't just value that could pass but any kind of information as an instance, copyrights or ownership. Returning to my previous example, I dispatched Ron a small fraction of a bitcoin (\$5.00). The entire community now is aware of I sent a fraction of a bitcoin.

Ron keeps song of it; it's far at the blockchain. I can also attach possession to an automobile, a house, an inventory, or a bond digitally almost like stapling it to that small fraction of a bitcoin that changed into practically worthless. Think about how that adjustments things. The whole network, essentially the entire international, sees that I've sent, for example, a share of IBM to Ron, and he is now the proprietor of it. The opportunities are amazing. In phrases of advent, Bitcoins are in reality one of the best innovations. With the amount of popularity that it enjoys, it is able to not be viable for the authorities to absolutely ban bitcoins. Most banks in recent times are looking to use the blockchain era and for the reason that government has no longer authorized Bitcoins. Consequently, whether or not bitcoin or now not, a primary a part of transactions in the destiny will occur through using cryptocurrencies.

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<https://www.blockchain.info>
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Notes

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