

An Analysis of The Current State of Cryptocurrency Regulation and Its Impact on The Adoption of Crypto currencies in Different Region

^[1] Surendra Sharma, ^[2] Gaurav Singh, ^[3] Yogesh Singh, ^[4] Deshraj Singh

^[1] Professor, Computer Science Engineering
Arya Institute of Engineering and Technology, Jaipur

^[2] Assistant Professor, Mechanical Engineering
Arya Institute of Engineering Technology & Management, Jaipur

^[3] Research Scholar, Computer Science and Engineering
Arya Institute of Engineering and Technology

^[4] Research Scholars, Computer Science and Engineering
Arya Institute of Engineering and Technology

Abstract: Cryptocurrency is a latest and large innovation within the financial industry. The purpose is to offer a currency that isn't always tied, created, or subsidized by way of a government. Cryptocurrency uses Blockchain technology as the economic platform. Cryptocurrency adoption degree has multiplied, and the marketplace has grown dramatically. The intention of this paper is to fill the gap inside the cutting-edge literature by way of investigating the modern cryptocurrency adaptation stage, adoption-influencing factors, supplying an In depth analysis of these factors and discussing some pitfalls surrounding the cryptocurrency exchange sites' users. In addition, the paper shows that the principle factors driving the adoption choice revealed from the literature evaluate are the investment possibility cryptocurrency paperwork, the anonymity of the transactions and privateness, the popularity through companies as a payment approach, the quick transfer of finances, the low price of transactions, and technological curiosity. The research findings help research, regulators, and cryptocurrency developers to better apprehend their consumer's aim toward cryptocurrency adoption.

Keywords: Cryptocurrencies, bank, monetary systems, GCC states, Adoption-Influencing

1. Introduction

The cryptocurrency industry has evolved at high speed in the recent years and its adoption as well . Cryptocurrency utilize cryptographic methods to transmit digital information to ensure valid and legit transactions.

It is consider as an innovation in the virtual currency and the financial industry as well Cryptocurrency is intended to substitute the exiting printed currency to provide a peer-to-peer medium of exchange.

It embraces the main characteristics of money to some extent. Eichmann and Sandner claims that Bitcoin is a medium of exchange, a unit of account and a store of value which fulfils the definition of money.

Cryptocurrency industry has grown dramatically. The cryptocurrency total market value in January 2017 was at \$31B that increased to around \$700b in January 2018. According to cryptocurrency market value fluctuates due to its high level of volatility. The industry's market value is larger than some major technology companies as well as some of the world economics.

Bitcoin is the market leader account for most of its value. Bitcoin was the first cryptocurrency introduced in the market by pseudonymous entity named Satoshi Nakamoto in 2009.but the real market for cryptocurrency started in 2013. Today, there is more than 23,000 different altcoins in the market. The cryptocurrency goal is to offer a currency that is free from a central authority or government control and just relay on a cryptographic proof.

The cryptocurrency adoption differs from one country to another due to economic and technological factors. Hileman proposed an index to measure the potential utility of bitcoin adoption among 178 countries. The index utilizes seven mains' factors: technology penetration, international remittances, historical financial

crises, and bitcoin penetration. The goal of the index is to identify the countries with the greatest chance of bitcoin adoption. The results indicate that the top three countries with the highest chances of adoption are Argentina, Venezuela, and Zimbabwe.

The motive of this paper is to replenish the gap in the present literature by inspecting the factors that influence the user's objective to adopt cryptocurrency.

2. Literature Review

Cryptocurrency adoption level: - The increase in the acceptance as well as the adoption level of cryptocurrencies can be acknowledged by the following: estimated number of users, transactions volume, and market capitalization. The peak attained by cryptocurrencies market value by the end of 2023 is more than \$1.12 Trillion dollars. However, the excessive volatility of the fee influences the market capitalization dramatically. For the wide variety of cryptocurrency customers, the precise range of users cannot be determined but it may be predicted. We can look at it by checking the predicted number of wallets created, wide variety of particular addresses, and range of customers of the exchange web sites. It is predicted that the quantity of bitcoin customers will reach 1Billion with the aid of 2030. The wide variety of wallets created does now not reflect the wide variety of customers seeing that a unmarried person may have more than one wallet. The envisioned general range of the blockchain pockets users international suggests a developing wide variety of wallets created with a complete wide variety of 85 million blockchain pockets user.

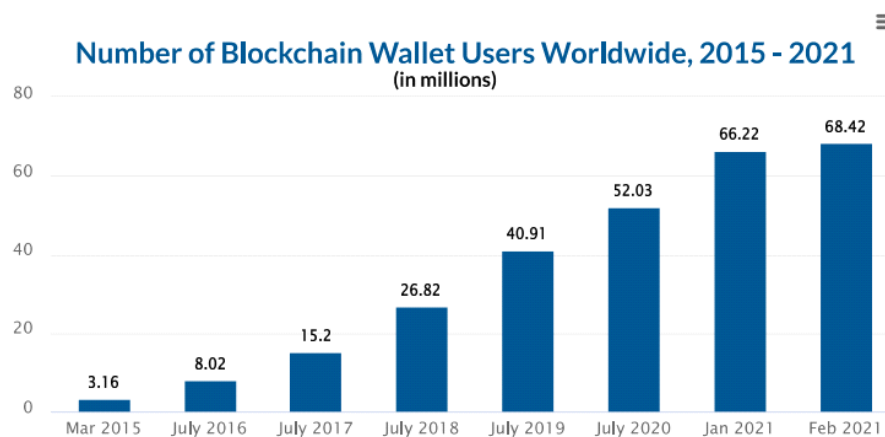


Fig 1: No. of blockchain wallet users worldwide 2015-2021

The fig. Shows the boom in the blockchain pockets users among the 2015 and the first sector of 2021. The cryptocurrency trade web sites wherein customers can buy and sell coins and use as pockets platform gives a excellent estimate of the cryptocurrency number of customers. For instance, cash base, one in all the biggest cryptocurrency alternate sites has more than 13m energetic customers.

Related Research on Cryptocurrency and person adoption: - researchers have used theories including Diffusion of Innovation Theory and Unified Theory of Acceptance and Use of generation. UTAUT. To recognize. Different aspects of cryptocurrency adoption. The diffusion of innovation idea. (DOI) Developed through Rogers. Aims at explaining how, why and at what charge new thoughts, innovations and technologies Spread. Presthus and O'Malley applied the Diffusion of Innovation idea to investigate the stop person's motivations and barriers of cryptocurrency adoption. The finding indicates that customers are prompted to adopt Bitcoin because of their Technological curiosity. Two challenges from the recognised customers angle had been identified. The value of protection troubles as well as they're watching for others to undertake Bitcoin first.

The Unified Theory of Acceptance and Use of Technology (UTAUT). The model changed into advanced by means of Venkatesh. A yr. all to apprehend the consumers popularity and use of the brand new technology innovations like cryptocurrency. Gunawan and Novendra, performed an empirical look at to analyse Bitcoin Acceptation. In Indonesia, the use of UTAUT. He's quite found dead performance expectancy and social have an impact on constructs significantly impact the behavioural purpose to apply Bitcoin. Also, the factors of

performance expectancy. And facilitating. Yeah. Conditions are the primary elements impacting the use of Bitcoin era. Neske used UTAUT. To examine the adoption of the new era through Africans. The hedonistic motivation habit and charge price constructs are delivered to the UTAUT version. The goal become to get admission to whether or not cryptocurrency might be sizable for financial boom of a number of the African nations. This have a look at indicates that the Performance affect expectancies social have an effect on constructs are good sized for African international locations. Also, Nashik indicates that the anonymity of the transaction is the primary benefit of using Bitcoin, even as robust volatility, loss of person friendliness and its use in crook activities are the drawbacks of Bitcoin. Another research investigated the popularity of digital economic trade Bitcoin by informational safety experts. Used the. UTAUT. Suggest a modification on UTAUT model for the case of Bitcoin.

Furthermore, interviews have been performed to seize the customers. Opinions in the direction of cryptocurrency and explanatory interview with cryptocurrency customers revealed a nice mindset towards. The use of cryptocurrency has charge gadget inside the destiny. They trust that the usability, usefulness and subjective norms are important elements for the adoption of cryptocurrency. Another interview with Bitcoin users suggests three predominant adoption motivations. Bitcoins have an impact on the financial gadget, customers accelerated control over their cash and the fee of Bitcoin as a forex.

There were different cryptocurrency adoption motivations that have been reported in the previous literature. Study of the cryptocurrency customers in Malaysia discovered out customers have used cryptocurrency as a store of value for their wealth. Four and Basir studied the Bitcoin network of user and reported three fundamental motivation of cryptocurrency adoption, anonymity freedom and absence of agree with in banking gadget. Technologically, curiosity and funding opportunity are sizable elements of the adoption, according to Vistas and O'Malley. Moriel ETL. I accept as true with that Bitcoin provides a better alternative currency that improves customers' privacy, non-public liberty, and frees the forex from the nation and corporate oversight. Cryptocurrency offers a high degree of privacy and anonymity which can also motivate illegal activities together with cash laundering. Price balance, recognition, payment methods, forex and clear laws and regulation are full-size elements which have motivated and foster adoption as properly.

3. Discussion

The cryptocurrency adoption level is increasing and There are many factors influencing the adoption. There are many indicators of the adoption level, including cryptocurrency, number of wallets, unique address and number of confirmed transactions. But it is still very difficult to come up with an accurate or close estimation of the number of cryptocurrency users. We believed that the number of cryptocurrency exchange sites users gives very good estimates. A single user can only have one account in a single exchange due to the verification process required by exchanges to comply with the KUC regulation. On the other hand, a user can have multiple wallets for different altcoins and from hosts wallets. Each wallet can have multiple accounts or public keys. We serve the existing literature trying to find out the adoption impacting factors and classify them into groups. It seems that many people treat cryptocurrency as an investment vehicle. Rather than a currency. While others adopted for its innovation technical accepts, having a currency that is tighter or backed up by a government forms a very significant adoption criterion. The anonymity of the users is a crucial aspect. Even though every single transaction is recorded in public Ledger, the identity of the transaction owner is hidden with a private key. The full growth of cryptocurrency technology is at a very early age. Furthermore, cryptocurrency payment methods acceptance as well as readiness of crypto payment methods is still debatable, especially focusing on the cryptos other than bitcoin.

4. Conclusion

The purpose of this paper is to invest. Did the cryptocurrency adoption preference. We observe the factors influencing the adoption choice and offer as in-intensity evaluation of every issue. We attempt to look at the stepped forward adoption stage through time by way of analysing the market capitalization. Estimated wide variety of customers and each day extent. The extensive style of cryptocurrency changes web sites customers inside the maximum correct indicator of the amount of cryptocurrency customers, the studies endorse that the factors influencing the adoption selection fall into four crucial classes. Technical, economic, social and personal.

The maximum influencing factors for customers are based at the literature examine or the investment opportunity. Anonymity attractiveness by means of the usage of businessmen. As charge technique, fast switch of fund, low fee of transactions and technological curiosity elements, this paper can be extended in more than one pointer for destiny studies. A viable way this literature may be extended is to. But each. A multi standards selection model to assess the adoption factors if findings of this studies assist researchers, regulators and cryptocurrency builders better apprehend their client's intention in the path of cryptocurrency adoption.

5. Future Directions

This paper only provides A literature review on the factors influencing the adoption decision. This paper could be extended in multiple directions for future research. A possible way is to propose. A multi criteria decision model to access the adoption factors. The multi criteria model can be combined with the pairwise comparison method to come up with a ranking of most important influencing factors. Also, we can use this literature as a base to build a model on a base. Of this technology acceptance mode or the unfilled theory of acceptance and use of technology. Then create a survey to test the significance of these factors.

References

- [1] R. Farrell, NSIS of the Cryptocurrency Industry. Walton Research Scholars Journal.
- [2] Shahid Azrin, Portland State University.
- [3] Jay Bore and Embassy who uses Bitcoin and exploration of the Bitcoin community. In 2014, 12th Annual International Conference on Privacy, Security, and Trust.
- [4] Baek C. & Elbeck M. Bitcoins as an Investment or Speculative Vehicle? A First Look, 22(1) Applied Economics Letters 30 (2014).
- [5] Cvetkova i. Cryptocurrencies Legal Regulation, 5(2) BRiCS Law Journal 128 (2018).
- [6] Godsiff P. Bitcoin: Bubble or Blockchain in Agent and Multi-Agent Systems: Technologies and Applications: 9th KES International Conference, KES-AMSTA 2015 Sorrento, Italy, June 2015, Proceedings 191 (G. Jezic et al. (eds.), Cham: Springer, 2015).
- [7] Lansky J. Possible State Approaches to Cryptocurrencies, 9(1) Journal of Systems integration 19 (2018).
- [8] Siddiqi H. The Routes to Chaos in the Bitcoins Market, 3(3) Review of Business and Economics Studies 32 (2015).
- [9] P.R.C. Laws on the People's Bank of China, art. 20, available at http://www.china.org.cn/business/laws_regulations/200706/22/content_1214826.htm.
- [10] R. Kaushik, S. Soni, A. Swami, C. Arora, N. Kumari and R. Prajapati, "Sustainability of Electric Vehicle in India," *2022 International Conference on Inventive Computation Technologies (ICICT)*, Nepal, 2022, pp. 664-667.
- [11] P. K. Bhatt and R. Kaushik, "Analysis and Optimum Energy Management of Renewable Integrated Rural Distribution Network", *2022 Second International Conference on Artificial Intelligence and Smart Energy (ICAIS)*, pp. 1583-1588, 2022.
- [12] R. Kaushik, O. P. Mahela and P. K. Bhatt, "Power Quality Estimation and Event Detection in a Distribution System in the Presence of Renewable Energy" in *Artificial Intelligence-Based Energy Management Systems for Smart Microgrids*, Publisher CRC Press, pp. 323-342, 2022, ISBN 9781003290346.
- [13] T. Manglani, R. Rani, R. Kaushik and P. K. Singh, "Recent Trends and Challenges of Diverless Vehicles in Real World Application", *2022 International Conference on Sustainable Computing and Data Communication Systems (ICSCDS)*, pp. 803-806, 2022.
- [14] Sharma, R. and Kumar, G. (2017) "Availability improvement for the successive K-out-of-N machining system using standby with multiple working vacations," *International journal of reliability and safety*, 11(3/4), p. 256. doi: 10.1504/ijrs.2017.089710.
- [15] Gireesh, K., Manju, K. and Preeti (2016) "Maintenance policies for improving the availability of a software-hardware system," in *2016 11th International Conference on Reliability, Maintainability and Safety (ICRMS)*. IEEE.