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AWARENESS & ADOPTION OF BLOCKCHAIN TECHNOLOGY: "AN EXPLORATORY RESEARCH"

Commerce

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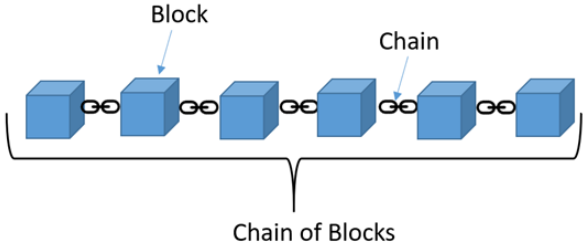
ABSTRACT

Society has become completely digitalized in today's world, with technology playing an extremely vital role in everyone's lives. Indian Crypto players have hailed the Budgetary announcement of the launch of RBI's digital currency using blockchain technology. Blockchain is important for storing data in such a way that it is difficult, to corrupt, hack, or cheat the system. However, the aim of the study is the present level of public awareness and understanding of blockchain technology. Quantitative research was adopted in the present study to examine the opinions, awareness, and challenges that had faced by the adoption of blockchain technology by individual respondents. The resulting questionnaire consists of items on respondents' demographic, their awareness, and challenges that had faced with the adoption of blockchain technology. The convenience sampling method is used and the results demonstrate that the awareness level of blockchain technology most of the respondents are unaware and familiarity with blockchain technology is the most influential barrier that impedes blockchain adoption. blockchain technology is beneficial to all industries, and businesses and the general public should keep updated with the latest technology.

KEYWORDS

INTRODUCTION TO BLOCKCHAIN TECHNOLOGY

The blockchain is a continuously growing list of the blocks of data linked and secured using cryptography. This makes it a trusted database. This trust is maintained by open, secure, computer-coded encryption instead of any single institution. This technology is currently used in various areas like Cryptocurrency, Banking, Supply Chain, Recordkeeping, digital ledger Auditing, Legal area, Finance, and Accounting. Also, it is currently one of the most demanded skills Blockchain is a method of storing data in such a way that it is difficult, to corrupt, hack, or cheat the system. A blockchain, in scientific terms, is a collection of blocks that connect data in sequential order. A block is a collection of data and information collected in a previous block, as well as a hash of that block.



Source; https://www.pinterest.com/pin/783626403889621455/

Blockchain technology has demonstrated to have enormous potential in the financial sector. After demonetization, banking institutions were unable to cope with the increased workload, highlighting the importance of having a centralized specialist to manage financial transactions. as the possibility of, as a result, The Reserve Bank of India (RBI) published a white paper in 2018 to examine various blockchain application areas in Indian banking.

Blockchain technology will transform the functionality of B2B, G2C, G2G, and B2G services across multiple application domains. Healthcare, governance, cyber security, autos, media, travel, logistics & hospitality, education, law, and energy can all benefit from its application. The materialization of blockchain technology also holds potential for the government in terms of transparency and accountability, as well as the provision of frictionless transactions with citizens.

This study has looked into the awareness, and adoption of blockchain technology about awareness, adoption, and basic knowledge among people regarding blockchain technology.

Review Of Literature

Deepak Mathivathanan, K. Mathiyazhagan, Nripendra P. Rana, Sangeeta Khorana & Yogesh K. Dwivedi [Year2021]

This technology, which supports cryptocurrencies, provides a distributed database of digital assets that is irreversible, decentralized, and transparent for use by enterprises in supply chains. However, not all businesses are well-suited to integrate blockchain into the existing supply chain, owing to a lack of understanding of the technology's benefits. MICMAC categorizes blockchain adoption hurdles depending on their strength and reliance. According to the findings of this study, the most prominent barriers to blockchain adoption are a lack of corporate understanding and familiarity with blockchain technology and what it might bring to future supply chains.

Lindholm, Ellen [Year2021]

The main focus of the thesis is on blockchain technology adoption, knowledge, and barriers in the Finnish real estate business. The study's goal is to assess the state of blockchain acceptance and knowledge in the Finnish real estate sector, as well as to identify hurdles to blockchain implementation. The study is based on a review of the literature, theoretical foundation, and empirical investigation. Reading scholarly literature on innovation adoption theory and the evolution of disruptive technologies was used to perform the literature review. In addition, the literature study discusses the progress of blockchain technology and its potential impact on the real estate market. The empirical research was carried out in the form of an online survey, which was distributed to participants in the Finnish real estate sector.

Nazir Ullah ,Waleed Mugahed Al-Rahmi ,Ahmed Ibrahim Alzahrani ,Osama Alfarraj and Fahad Mohammed Alblehai [2021]

The conventional teaching system in underdeveloped countries has lately been improved by adopting the most recent distributed ledger technology. Disruptive technology is a prerequisite for increased responsibility and exposure. We investigated the important elements influencing educational institutions' intent to embrace blockchain technology for e-learning. By incorporating the diffusion of innovation theory, this study offered an enhanced model of the Technology Acceptance Model. The conceptual model was evaluated and validated using structural equation modeling based on an online poll. The findings revealed that compatibility substantially impacts the deployment of blockchain in smart learning settings. Other major implications of blockchain technology adoption have also been discovered.

M.L.M. Vergouwen [Year2020]

In this study Internal (organizational) variables influence the adoption of blockchain technology by organizations in the Netherlands. Top management support, willingness to collaborate, organizational readiness, and economic rewards all have a favorable effect on adoption, but a lack of understanding harms adoption. From an external (environmental) standpoint, five additional major criteria influence the adoption of blockchain technology by enterprises in the Netherlands. These are competitive pressure, solution maturity, and

standardization, all of which have a good effect on adoption, and absence of regulation and legislation, as well as bad perception, which harm adoption. Finally, four main criteria influence the technological adoption of blockchain technology by enterprises in the Netherlands.

Ku Ruhana Ku-Mahamud#1, Mazni Omar#2, Nur Azzah Abu Bakar#3, Ishola Dada Muraina#4 [2019 YEAR]}

The purpose of this study is to look into the level of understanding, trust, and adoption of blockchain technology among Malaysia's blockchain community. In this study, a quantitative method was used, with a new questionnaire designed in the first phase to assess the level of awareness, adoption, and trust in blockchain technology applications across Malaysian blockchain groups. The resulting questionnaire includes questions about respondents' demographics, as well as their knowledge, trust, and acceptance of FinTech, especially blockchain technology and cryptocurrency. Pilot research was carried out in the second phase. During the third part of the survey, descriptive statistics were utilized in the analysis, and the results show that the level of awareness of blockchain technology and cryptocurrencies is intermediate.

OBJECTIVES

- The aim of studying the present level of public awareness and understanding of blockchain technology.
- To studies that have recognized the potential of blockchain to be a keystone technology.
- To Study the challenges in the adoption of blockchain technology in the future.

Research Design

There are many sampling methods for conducting a study or survey, both probability sampling, and non-probability sampling. the convenience sampling method is used in this research paper. Quantitative research was adopted in the present study to examine the opinions, awareness, and challenges that had faced by the adoption of blockchain technology by individual respondents. The survey was conducted by using the validated questionnaire on a population of 150 users. Data were obtained from 108 respondents, but only 44 respondents are aware of blockchain technology & the remaining 64 are not aware of the technology. The first step is to circulate the questionnaire by using an online survey can use Google Forms was used to capture survey responses, allowing easier data collection. Potential survey participants were contacted via e-mail and WhatsApp was given the URL for accessing the online questionnaire. Input and processing of the data were first done via MS Excel when coding data. For mathematical research, this coded excellence book was also imported into SPSS. The Chi-Square test is used.

Data Presentation, Analysis & Interpretation

Results of the analysis are presented in two (4) sections: i) the respondent profile ii) the awareness, iii] the level of your familiarity with Blockchain Technology VI] challenges faced in the adoption of blockchain technology.

I] One hundred eight respondents participated in this survey. the gender distribution details being given that 59 Respondents that is 55% percent of female and 49 Respondents 45% percentage of Male filled I the questionnaire. It shows that more respondents are from the 20 to 40 age category.

Age	Respondent	Percentage
Below 20	15	14%
20 to 40	84	78%
40 and above	9	8%
Total	108	100%

The highest academic qualification of the respondents who participated is B.com, M.com, BBA, MBA, BTET, CA, CS, M TECH M. PHIL Ph.D. And MCA. The Education level is important to determining the present level of public awareness and understanding of blockchain technology and the challenges in the adoption of blockchain technology in the future.

Qualification	Respondent	Percentage
B.COM	22	20%
M.COM	15	14%
BBA	16	15%
MBA	17	16%
BEST	23	20%
CA	2	2%
CS	1	1%
M TECH	4	4%
M.PHIL	1	1%
PHD	2	2%
MCA	5	5%
Total	108	100%

Ii]) The majority of respondents are unaware of blockchain technology. the result shows that 41 percent of Respondents are Aware and 59 percent of Respondents are Not Aware of the Blockchain Technology.

Have you heard about the term "Blockchain Technology"?	Respondent	Percentage
YES	44	41%
NO	64	59%
Total	108	100%

Iii] it shows the level of familiarity with Blockchain Technology Most of the respondents are Not at all familiar with Blockchain Technology showing59 percent of Respondents, slightly familiar are 18 percent Respondents, somewhat familiar are 18 percent Respondents, moderately familiar are 4 percent of Respondents and at last Extremely familiar is only 1 percent Respondent.

Not at all familiar	Slightly familiar	Somewhat familiar	Moderately familiar	Extremely familiar
59%	18%	18%	4%	1%

Vi] challenges that are faced in the adoption of blockchain technology It faces different adoption barriers before it is integrated into society. It includes scalability, the time needed to verify transactions, the cost of transactions, and security.

Results And Testing

Hypothesis 1:

H_0 = There is no significant association between level of familiarity with Blockchain technology &Qualification Respondent.

H_1 = There is a significant association between the level of familiarity with Blockchain technology & the Qualification Respondent.

Chi-Square Tests

	Value	df	Asymp Sing. [2-sided]
Pearson Chi-Square	8.990a	21	.989
Likelihood Ration	9.656	21	.983
Linear by-Linear Association	.128	1	.720
N of Valid Cases	44		

The minimum expected count is .02. that the expected count is not less than 5. cell have expected are 100%it is greater than 5 it shows that 32cells or 100% have extended count less than 5 this assumption is violated because 100%.her the level of significance is greater than 0.05 we can say that there is no significant association between level of familiarity with Blockchain technology &Qualification Respondent.

CONCLUSION

The results of this research indicate that the lack of awareness and familiarity with blockchain technology is the most influential barrier that impedes blockchain adoption as we know Blockchain is an emerging technology with a wide array of potential applications. This technology, which underpins cryptocurrency, provides an immutable, decentralized, and transparent distributed database of digital assets for use by firms in supply chains. However, not all businesses are well-suited to incorporating blockchain into their existing supply chain, owing to a lack of understanding of the technology's benefits."

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