INTERNATIONAL JOURNAL FOR LEGAL RESEARCH AND ANALYSIS

Open Access, Refereed JournalMulti Disciplinary
Peer Reviewed Edition :

www.ijlra.com

 ISSN: 2582-6433

DISCLAIMER

ISSN: 2582-6433

EDITORIAL TEAM

EDITORS

Megha Middha

Megha Middha, Assistant Professor of Law in Mody University of Science and Technology, Lakshmangarh, Sikar

Megha Middha, is working as an Assistant Professor of Law in Mody University of Science and Technology, Lakshmangarh, Sikar (Rajasthan). She has an experience in the teaching of almost 3 years. She has completed her graduation in BBA LL.B (H) from Amity University, Rajasthan (Gold Medalist) and did her post-graduation (LL.M in Business Laws) from NLSIU, Bengaluru. Currently, she is enrolled in a Ph.D. course in the Department of Law at Mohanlal Sukhadia University, Udaipur (Rajasthan). She wishes to excel in academics and research and contribute as much as she can to society. Through her interactions with the students, she tries to inculcate a sense of deep thinking power in her students and enlighten and guide them to the fact how they can bring a change to the society

Dr. Samrat Datta

Dr. Samrat Datta Seedling School of Law and Governance, Jaipur National University, Jaipur. Dr. Samrat Datta is currently associated with Seedling School of Law and Governance, Jaipur National University, Jaipur. Dr. Datta has completed his graduation i.e., B.A.LL.B. from Law College Dehradun, Hemvati Nandan Bahuguna Garhwal University, Srinagar, Uttarakhand. He is an alumnus of KIIT University, Bhubaneswar where he pursued his post-graduation (LL.M.) in Criminal Law and subsequently completed his Ph.D. in Police Law and Information Technology from the Pacific Academy of Higher Education and Research University, Udaipur in 2020. His area of interest and research is Criminal and Police Law. Dr. Datta has a teaching experience of 7 years in various law schools across North India and has held administrative positions like Academic Coordinator, Centre Superintendent for Examinations, Deputy Controller of Examinations, Member of the Proctorial Board

ISSN: 2582-6433

Dr. Namita Jain

Head & Associate Professor

School of Law, JECRC University, Jaipur Ph.D. (Commercial Law) LL.M., UGC -NET Post Graduation Diploma in Taxation law and Practice, Bachelor of Commerce.

Teaching Experience: 12 years, AWARDS AND RECOGNITION of Dr. Namita Jain are - ICF Global Excellence Award 2020 in the category of educationalist by I Can Foundation, India.India Women Empowerment Award in the category of "Emerging Excellence in Academics by Prime Time & Utkrisht Bharat Foundation, New Delhi.(2020). Conferred in FL Book of Top 21 Record Holders in the category of education by Fashion Lifestyle Magazine, New Delhi. (2020).Certificate of Appreciation for organizing and managing the Professional Development Training Program on IPR in Collaboration with Trade Innovations Services, Jaipur on March 14th, 2019

Mrs.S.Kalpana

Assistant professor of Law

Mrs.S.Kalpana, presently Assistant professor of Law, VelTech Rangarajan Dr. Sagunthala R & D Institute of Science and Technology, Avadi.Formerly Assistant professor of Law,Vels University in the year 2019 to 2020, Worked as Guest Faculty, Chennai Dr.Ambedkar Law College, Pudupakkam. Published one book. Published 8Articles in various reputed Law Journals. Conducted 1Moot court competition and participated in nearly 80 National and International seminars and webinars conducted on various subjects of Law. Did ML in Criminal Law and Criminal Justice Administration.10 paper presentations in various National and International seminars. Attended more than 10 FDP programs. Ph.D. in Law pursuing.

Avinash Kumar

Avinash Kumar has completed his Ph.D. in International Investment Law from the Dept. of Law & Governance, Central University of South Bihar. His research work is on "International Investment Agreement and State's right to regulate Foreign Investment." He qualified UGC-NET and has been selected for the prestigious ICSSR Doctoral Fellowship.He is an alumnus of the Faculty of Law, University of Delhi. Formerly he has been elected as Students Union President of Law Centre-1, University of Delhi.Moreover, he completed his LL.M. from the University of Delhi (2014-16), dissertation on "Cross-border Merger & Acquisition"; LL.B. from the University of Delhi (2011-14), and B.A. (Hons.) from Maharaja Agrasen College, University of Delhi. He has also obtained P.G. Diploma in IPR from the Indian Society of International Law, New Delhi.He has qualified UGC – NET examination and has been awarded ICSSR – Doctoral Fellowship. He has published six-plus articles and presented 9 plus papers in national and international seminars/conferences. He participated in several workshops on research methodology and teaching and learning.

ISSN: 2582-6433

ABOUT US

INTERNATIONAL JOURNAL FOR LEGAL RESEARCH & ANLAYSIS ISSN 2582-6433 is an Online Journal is Monthly, Peer Review, Academic Journal, Published online, that seeks to provide an interactive platform for the publication of Short Articles, Long Articles, Book Review, Case Comments, Research Papers, Essay in the field of Law & Multidisciplinary issue. Our aim is to upgrade the level of interaction and discourse about contemporary issues of law. We are eager to become a highly cited academic publication, through quality contributions from students, academics, professionals from the industry, the bar and the bench. INTERNATIONAL JOURNAL FOR LEGAL RESEARCH & ANALYSIS ISSN 2582-6433 welcomes contributions from all legal branches, as long as the work is original, unpublished and is in consonance with the submission guidelines.

ISSN: 2582-6433

CRYPTOCURRENCY AND BLOCKCHAIN TECHNOLOGY ADOPTION IN INDIAN BUSINESSES

AUTHORED BY- PRATHAM GUPTA
KIRIT P MEHTA SCHOOL OF LAW

ABSTRACT

The use of cryptocurrencies and blockchain technology in Indian enterprises is the subject of this study paper. It is crucial to look at how Indian businesses are utilising these cutting-edge technologies given the rapid expansion of the digital economy and the rising popularity of cryptocurrencies globally. The goal of the study is to analyse the factors influencing the adoption of cryptocurrencies and blockchain technology while taking into account the particular socioeconomic situation in India. This research study investigates the variables impacting the adoption of cryptocurrencies and blockchain technology in Indian enterprises through a thorough assessment of the body of existing literature. It looks at the cultural, technological, and market elements that affect adoption as well as the regulatory environment. The study also explores many blockchain technology applications, including supply chain management, identity verification, and smart contracts, and their potential effects on Indian enterprises.

Keywords: cryptocurrency, blockchain technology, adoption, Indian businesses, technology integration, socio-economic context.

INTRODUCTION

The global financial landscape has been shaken up by the emergence of cryptocurrencies and blockchain technology, which have the power to transform established structures and change entire sectors. The use of cryptocurrencies and blockchain technology by enterprises has important ramifications in India's situation as a rapidly developing country renowned for its technological acumen and inventiveness. The purpose of this research study is to examine the motivations, difficulties, and potential advantages of cryptocurrency and blockchain technology adoption in Indian enterprises within the specific socioeconomic setting of that nation. Cryptocurrencies, led

ISSN: 2582-6433

by Bitcoin, have entered the mainstream as competitive alternatives to established fiat currencies thanks to their widespread acceptance and rising appeal. Blockchain technology, a decentralised, unchangeable database that enables safe transactions and open record-keeping, is at the heart of cryptocurrencies. Supply chain management, identity verification, and decentralised applications are just a few of the areas where blockchain technology has potential uses outside of just financial transactions. It is important to take into account a number of important elements in order to comprehend how blockchain technology and cryptocurrencies are being used by Indian enterprises.The regulatory environment is of utmost importance because it has a big impact on the adoption's potential and viability. In defining the regulatory environment, the Reserve Bank of India (RBI), the nation's central bank, has been extremely influential. The Reserve Bank of India has fluctuated over the years between caution and interest. In 2018, it imposed limitations on cryptocurrency-related activity, which the Indian Supreme Court later overturned in 2020.

Determining the likelihood of effective bitcoin and blockchain adoption depends critically on technological infrastructure and market dynamics. India has made impressive strides in terms of smartphone use, internet penetration, and digital infrastructure, creating a favourable climate for technology-driven breakthroughs. Another indication of a developing ecosystem that encourages adoption is the existence of bitcoin exchanges and blockchain firms. However, in order to fully utilise the capabilities of these technologies, issues with scalability, transaction speed, energy consumption, and interoperability must be resolved.

The overall goal of this research piece is to provide a thorough overview of how blockchain technology and cryptocurrencies are being used by Indian enterprises, while also addressing the specific opportunities and problems that arise from India's particular socioeconomic situation.

REVIEW OF LITERATURE

1. **Behavioural intention towards investment in cryptocurrency - Bharadwaj, S., & Deka, S. (2021)**[1]- Investing in cryptocurrencies is still a subject of scepticism despite being one of the fastest-growing digital assets in the modern era. The goal of the current survey is to ascertain how Generation Z Indians feel about investing in cryptocurrency. The study examines the conduct of

[1] Bharadwaj, S., & Deka, S. (2021, December). In *Forum Scientiae Oeconomia* (Vol. 9, No. 4, pp. 137-159)

ISSN: 2582-6433

respondents between the ages of 18 and 23, integrating the Technology Acceptance Model and Rogers' Diffusion of Innovation Theory. According to the study, perceived usefulness and perceived ease of use are influenced by complexity, compatibility, and observability, which in turn influence behavioural intention. It is considered unique because it merges the two most important theories of technology adoption and offers practical implications for cryptocurrency exchanges and online trading platforms in addition to adding significantly to the body of literature.

2. **Critical success factors of Blockchain technology adoption for sustainable and resilient operations in the banking industry during an uncertain business environment - Mishra, R., Singh, R. K. Kumar, S. Mangla, S. K., & Kumar, V. (2023)**[2] - Adoption of blockchain technology (BCT) by banks can boost resilience and make banking operations secure in times of rising risks and ambiguity. In keeping with this, the objective of this study is to identify and model the key success factors (CSFs) of the use of blockchain technology for enduring and reliable banking operations. From the literature and semi-structured interviews, seventeen CSFs were found. Following that, the fuzzy Delphi approach was used to confirm 15 CSFs, and the Decision-Making Trial and Evaluation Laboratory method was used to create cause-and-effect correlations. According to study findings, the most important CSFs of blockchain technology are user data privacy and ease of local and global legislation and regulation, and these require a high level of attention from management and decision-makers to realise sustainability and resilience in the banking sector. The study will aid professionals and decision-makers in comprehending the significance of CSFs and in developing a plan for the banking industry's successful use of blockchain technology.

3. **Blockchain for social business: Principles and applications - Mukkamala, R. R Vatrapu, R, Ray, P. K. Sengupta, G & Halder, S. (2018)**[3] - Growing research interest and practitioner interest in examining the viability of Blockchain technology for decentralised applications across numerous fields has been observed in recent years. The use of blockchain technology to address some of the major issues in the field of social business (SB) is examined in this article. SB is a business model for putting money into social initiatives to help underprivileged communities thrive socioeconomically. The ideas and applications of blockchain that improve trust, transparency, and auditability in SB operations are identified and discussed in this article. We discuss the difficulties in developing a native coin for SB as well as the impediments to infrastructure and technology adoption by various SB stakeholders.

[2] Mishra, R., Singh, R. K., Kumar, S., Mangla, S. K., & Kumar, V. (2023). *Electronic Commerce Research*, 1-35.
[3] Mukkamala, R. R., Vatrapu, R., Ray, P. K., Sengupta, G., & Halder, S. (2018).. *IEEE Engineering Management Review*, *46*(4), 94-99.

ISSN: 2582-6433

ANALYSIS

Current State of Adoption of Blockchain Technology in Indian Businesses-

The adoption of cryptocurrencies and blockchain technology has drawn a lot of attention recently, offering businesses around the world both benefits and challenges. Understanding the present state of acceptance of cryptocurrencies and blockchain technology becomes essential in the context of India, a nation renowned for its thriving entrepreneurial ecosystem and technological breakthroughs. In order to shed light on important trends, drivers, and difficulties within the Indian industry, this report intends to evaluate the degree of integration and deployment of cryptocurrencies and blockchain technology in Indian organisations.

Adoption Level: The research shows that Indian firms are gradually but increasingly adopting cryptocurrencies and blockchain technologies. Although the Indian cryptocurrency market previously had legislative uncertainty, a more favourable atmosphere for adoption was created by the Supreme Court of India's momentous decision in 2020 to overturn the ban on cryptocurrencies. As a result, a number of established companies and startups in India have entered the cryptocurrency market, providing trading platforms, wallets, and other associated services[4].

It is crucial to remember that India is still a relatively young market for cryptocurrency adoption when compared to other nations. Both the total number of transactions involving cryptocurrencies and the range of companies that do so are still quite small. Despite this, there has been a steady rise in interest in and knowledge of cryptocurrencies and blockchain technology.

Industries Leading the Adoption: A few industries in India have demonstrated a higher inclination for embracing blockchain technology and cryptocurrencies. The fintech industry, which includes peer-to-peer lending platforms, remittance services, and payment firms, has emerged as a leader in utilising blockchain technology to increase productivity, lower costs, and increase security. In addition, sectors like supply chain management, healthcare, and real estate are looking into how blockchain technology could be used to improve workflow, guarantee transparency, and reduce fraud. The use of cryptocurrencies and blockchain technology in Indian enterprises is influenced by a number of factors[5]. As blockchain technology offers secure and transparent transactions without the need for intermediaries, cost reduction and operational efficiency are significant

[4] Pal, A., Tiwari, C. K., & Behl, A. (2021). *Journal of Global Operations and Strategic Sourcing*.
[5] Shakya, V., Kumar, P. P., & Tewari, L. (2021, May). (pp. 361-368). IEEE.

ISSN: 2582-6433

drivers. Businesses looking to improve operational efficiency are becoming interested in blockchain because of its capacity to enable quicker and more efficient procedures, particularly in industries with complicated supply chains.

Furthermore, organisations and consumers seeking greater data protection and privacy are drawn to the decentralised nature of blockchain technology. Blockchain offers an alternate framework for secure data management, which is important given the rising concerns about data breaches and cyber threats.

Limitations and Challenges: Although the adoption of cryptocurrencies and blockchain technology in Indian enterprises shows potential, there are a number of obstacles that must be overcome. Regulator ambiguity continues to be a major barrier, and the Reserve Bank of India (RBI) is still actively shaping the regulatory environment. Businesses are forced to operate in a cautious atmosphere due to the uncertainty, which affects their readiness to fully embrace blockchain technology and cryptocurrencies.

Widespread acceptance is also hampered by technical issues including scalability, interoperability, and energy consumption. To handle a higher volume of transactions and guarantee seamless system integration, blockchain platforms must overcome these constraints.

CONCLUSION

The adoption of cryptocurrencies and blockchain technology in Indian enterprises is currently at a growing but still developing stage, according to study. Although the Supreme Court of India's decision to lift the ban on cryptocurrencies in 2020 has improved the situation, India's acceptance of cryptocurrencies is still in its infancy compared to other developed nations. However, there are definite signs that Indian firms are becoming more interested in and knowledgeable about the potential advantages of cryptocurrencies and blockchain technology.

Fintech, supply chain management, healthcare, and real estate are just a few of the sectors that have emerged as leaders in embracing cryptocurrencies and blockchain technology. These sectors are aware that integrating decentralised ledger systems has the potential to increase efficiency, lower costs, and improve security. Broader adoption across sectors might be anticipated as the technology continues to develop and overcome technical obstacles.

ISSN: 2582-6433

Cost savings, operational effectiveness, data security, and privacy are some of the factors that encourage adoption. Businesses are interested in blockchain technology because it has the ability to expedite procedures, get rid of middlemen, and guarantee secure and transparent transactions. Additionally, people wanting greater data security and privacy are drawn to blockchain's decentralised nature, which allays worries about data breaches and online dangers.

There are still a number of obstacles and restrictions, though. The Reserve Bank of India (RBI) is keenly watching the cryptocurrency scene despite ongoing regulatory uncertainty. To increase corporate trust and adoption, legislation must be clear and supported by a supportive regulatory environment. To guarantee the seamless incorporation of blockchain technology into existing systems, technical concerns such as scalability, interoperability, and energy consumption must also be addressed.

Collaboration between industry stakeholders, governments, and regulators will be crucial as Indian enterprises negotiate these difficulties and opportunities. The adoption of cryptocurrencies and blockchain technology can be facilitated by a multi-stakeholder approach, allowing firms to take use of the potential advantages while addressing regulatory concerns.

In the Indian context, the report highlights the need for further investigation into cryptocurrencies and blockchain technologies. Future research should concentrate on tracking adoption patterns, analysing the effects on company performance and market dynamics, and coming up with solutions to unresolved issues.

REFERENCES

1. Bharadwaj, S., & Deka, S. (2021, December). Behavioural intention towards investment in cryptocurrency: an integration of Rogers' diffusion of innovation theory and the technology acceptance model. In *Forum Scientiae Oeconomia* (Vol. 9, No. 4, pp. 137-159)
2. Mishra, R., Singh, R. K., Kumar, S., Mangla, S. K., & Kumar, V. (2023). Critical success factors of Blockchain technology adoption for sustainable and resilient operations in the banking industry during an uncertain business environment. *Electronic Commerce Research*, 1-35.
3. Mukkamala, R. R., Vatrapu, R., Ray, P. K., Sengupta, G., & Halder, S. (2018). Blockchain for social business: Principles and applications. *IEEE Engineering Management Review*, *46*(4), 94-99.
4. Pal, A., Tiwari, C. K., & Behl, A. (2021). Blockchain technology in financial services: a comprehensive review of the literature. *Journal of Global Operations and Strategic Sourcing*.