American Journal Of Social Sciences And Humanity Research
(ISSN – 2771-2141)
VOLUME 03 ISSUE 04 Pages: 72-79
SJIF IMPACT FACTOR (2021: 5. 993) (2022: 6. 015) (2023: 7. 164)
OCLC – 1121105677
Crossref doi Google Scholar WorldCat MENDELEY
Publisher: Oscar Publishing Services

OSCAR PUBLISHING SERVICES

Journal Website: https://theusajournals.com/index.php/ajsshr

Research Article

BLOCKCHAIN AND CRYPTOCURRENCIES ARE CHANGING THE LANDSCAPE OF THE DIGITAL ECONOMY

Submission Date: April 20, 2023, Accepted Date: April 25, 2023,
Published Date: April 30, 2023
Crossref doi: https://doi.org/10.37547/ajsshr/Volume03Issue04-14

Turgunov Salokhiddin
Fergana Polytechnic Institute, Assistant, Uzbekistan

Gaybullaeva Gulbakhor
Fergana Polytechnic Institute, Assistant, Uzbekistan

Mirzakarimova Nargiza Alimdjanovna
Fergana Polytechnic Institute, Assistant, Uzbekistan

Abdukhamidova Shakhlokhon
FARPI, Student Of Economics, Uzbekistan

ABSTRACT

One of the most promising technologies is blockchain, which opens up new possibilities for secure and transparent transactions without intermediaries. Because of this, cryptocurrencies have become increasingly popular and are now used in various sectors of the economy.

KEYWORDS

Blockchain, cryptocurrency, transaction, costs, cyber security, finance, banking.

INTRODUCTION

In today's world, we are witnessing the rapid development of technology, which is changing not only our lives but also the economy as a whole. One of the most promising technologies is blockchain, which opens up new possibilities for secure and transparent transactions without intermediaries. Because of this, cryptocurrencies have become increasingly popular,

American Journal Of Social Sciences And Humanity Research
(ISSN – 2771-2141)
VOLUME 03 ISSUE 04 Pages: 72-79
SJIF IMPACT FACTOR (2021: 5. 993) (2022: 6. 015) (2023: 7. 164)
OCLC – 1121105677
Crossref doi Google Scholar WorldCat MENDELEY
Publisher: Oscar Publishing Services

and today they are used in various sectors of the economy, from finance to the healthcare industry.

The purpose of this article is to look at how blockchain and cryptocurrencies are changing the landscape of the digital economy, and to present concrete examples of their use in different sectors. We will look at how blockchain is changing traditional methods of storing and transmitting data, and how cryptocurrencies are providing new opportunities for financial transactions. We will also look at examples of the use of blockchain and cryptocurrencies in different sectors, including finance, healthcare, government and more. At the end of the article, we will assess how these technologies could change the future of the digital economy.

Blockchain is a distributed database that stores a chain of blocks, each containing information about transactions signed using cryptography. Blockchain technology enables the installation of decentralised management systems that operate without intermediaries and ensure the reliability and security of transactions.

A cryptocurrency is a digital currency that uses cryptography to secure transactions and manage the issuance of new units of currency. Cryptocurrencies can be used to make transactions in a decentralised environment without the involvement of intermediaries such as banks.

Developed in 2008 by Satoshi Nakamoto, Bitcoin was the first cryptocurrency based on blockchain technology. Bitcoin provides the user with the ability to store and transfer money without intermediaries such as banks. Instead, transactions are processed directly between users through a decentralised network. Due to its decentralised nature, Bitcoin provides a high degree of security and protection against fraud.

Blockchain technology has since been adapted for use in other fields such as logistics, medicine, law, real estate, voting and many others. Unlike traditional systems, blockchain provides a secure record-keeping system where data is stored in blocks that are linked together using cryptographic methods.

In addition, blockchain and cryptocurrencies offer new opportunities for the economy as a whole. For example, blockchain technology can create decentralised markets in which buyers and sellers can interact directly without intermediaries. This reduces transaction costs and increases transaction transparency.

Blockchain and cryptocurrencies have many applications in the economy. They allow for faster transactions, lower transaction costs and better security. They also enable a more transparent economy, where everyone involved can see all transactions on the blockchain.

American Journal Of Social Sciences And Humanity Research
(ISSN – 2771-2141)
VOLUME 03 ISSUE 04 Pages: 72-79
SJIF IMPACT FACTOR (2021: 5. 993) (2022: 6. 015) (2023: 7. 164)
OCLC – 1121105677
Crossref doi Google Scholar WorldCat MENDELEY
Publisher: Oscar Publishing Services

Blockchain and cryptocurrencies have enormous potential to change traditional methods of economic activity and create new development opportunities. Let's look at some of the roles of blockchain and cryptocurrencies in the economy below.

1. Improving efficiency and security of transactions

Blockchain technology provides security and transparency of transactions, which can reduce the time and cost of financial transactions. Through the use of a distributed database, transaction data is stored in an impregnable and secure form. This reduces the risks of fraud and errors in transaction processing.

2. Creating new forms of finance

Cryptocurrencies provide new funding opportunities. For example, through an ICO (Initial Coin Offering), investments can be raised during the creation phase of a new project. Cryptocurrencies can also be used as a means of payment or as a digital asset, thereby increasing financial transaction opportunities and improving access to financial services.

3. Reduction of transaction costs and cost management

Blockchain technology reduces transaction costs by eliminating the need for intermediaries such as banks or payment systems. This helps to reduce fees and reduce the time cost of transactions.

Improved transparency and trust

Blockchain technology improves transparency and trust in the economy as all transaction and transaction data is available to the public. This reduces the likelihood of fraud and provides a more transparent economic system.

4. Increased opportunities for micropayments

Cryptocurrencies provide opportunities for micropayments that cannot be effectively implemented in traditional financial systems.

Blockchain and cryptocurrencies have enormous potential to change traditional methods of economic activity and create new development opportunities. Let's look at some of the roles of blockchain and cryptocurrencies in the economy below.

Finance and banking:

Blockchain technology and cryptocurrencies are already being applied in the financial sector. For example, RippleNet uses blockchain technology to provide fast and secure payments globally, and major banks such as JP Morgan have already developed their own cryptocurrencies and use blockchain to make transactions.

RippleNet is a global payments network based on blockchain technology that enables fast and inexpensive transfer of money between countries. The

American Journal Of Social Sciences And Humanity Research
(ISSN – 2771-2141)
VOLUME 03 ISSUE 04 Pages: 72-79
SJIF IMPACT FACTOR (2021: 5. 993) (2022: 6. 015) (2023: 7. 164)
OCLC – 1121105677
Crossref doi Google Scholar WorldCat MENDELEY
Publisher: Oscar Publishing Services

average transaction time on RippleNet is 3-5 seconds and the fee is only $0.00001 per transaction. More than 300 financial institutions currently use RippleNet, including Standard Chartered and Santander.

Logistics:

Blockchain technology enables better tracking of goods, which is especially important for logistics companies. Companies such as Maersk are using blockchain to track containers, allowing them to make faster and more accurate decisions.

Internet of Things:

Blockchain and cryptocurrencies can be applied to the Internet of Things (IoT). For example, IOTA is a cryptocurrency that uses blockchain technology to connect multiple IoT devices, allowing them to exchange data and make transactions with each other.

The healthcare industry:

MedRec is a blockchain-based electronic medical record system that allows confidential medical information to be stored, processed and transferred. MedRec reduces errors and improves the quality of medical care, as well as increasing the security of storing and sharing medical information.

Gem is a blockchain platform that enables the management of medical data and events such as insurance, payments, prescriptions and more. The Gem system can speed up the payment process for medical services and increase the transparency and security of processing medical information.

Blockchain can help solve problems with fake paintings and other fake artwork. For example, ArtChain Global is a platform that uses blockchain to create unique digital prints on artworks and ensure their authenticity.

Because of their versatility, blockchain and cryptocurrencies have applications in a variety of sectors, including the financial sector, healthcare, law, logistics and many others.

In the financial sector, blockchain and cryptocurrencies can reduce transaction costs and improve transaction processing while ensuring data security and privacy. For example, blockchain can be used to create decentralised financial instruments, such as smart contracts and decentralised autonomous organisations (DAOs). Cryptocurrencies can also be used to create new investment opportunities, such as Initial Coin Offerings (ICOs).

In healthcare, blockchain could be used to store and share medical information, improving the process of diagnosing and treating patients. Cryptocurrencies can be used to create new financial models that allow patients to pay for healthcare services and medicines without intermediaries.

American Journal Of Social Sciences And Humanity Research
(ISSN – 2771-2141)
VOLUME 03 ISSUE 04 Pages: 72-79
SJIF IMPACT FACTOR (2021: 5. 993) (2022: 6. 015) (2023: 7. 164)
OCLC – 1121105677
Crossref doi Google Scholar WorldCat MENDELEY
Publisher: Oscar Publishing Services

In the legal realm, blockchain can be used to create electronic contracts and smart contracts, which will be a secure and reliable way to enter into and execute transactions. Cryptocurrencies can be used to provide secure payment for lawyers and other legal services.

In logistics, blockchain can be used to improve supply chain management, allowing for more efficient delivery of goods and lower logistics costs. Cryptocurrencies can be used to create new ways to pay for and account for goods and services within supply chains.

Cryptocurrencies can also be used to address financial and economic inclusion by providing access to financial services for those without bank accounts or credit history.

However, like any new technology, blockchain and cryptocurrencies have advantages and disadvantages. Advantages include decentralisation, transparency and reliability. But there are also disadvantages, such as the high energy consumption of mining cryptocurrencies and low transaction speeds.

Blockchain and cryptocurrencies are among the most debated and dynamic technologies on the market today. They can be used to create secure, transparent and fast transactions and to improve existing processes in various sectors of the economy. This significantly improves people's quality of life and allows markets to function more efficiently.

The use of blockchain and cryptocurrencies can benefit most sectors of the economy, as they can eliminate privacy, security and speed concerns and provide a decentralised and democratic governance system. Because of the wide range of applications and benefits they offer, blockchain and cryptocurrencies could change the landscape of the digital economy in the coming years.

Nevertheless, blockchain and cryptocurrencies continue to evolve and improve, and their applications are becoming more widespread every year. These technologies represent great potential for the economy and for improving people's lives, and we can expect even more growth and development in the future.

There are many ways in which blockchain and cryptocurrencies can improve existing processes as well as create new opportunities. They can be used to ensure transaction security and privacy, improve the speed and efficiency of processes, and address financial inclusion and public protection.

However, it is important to understand that blockchain and cryptocurrencies are still in a developmental stage and there may be problems and shortcomings. These technologies require further research and development, as well as regulation, in order to maximise their potential.

American Journal Of Social Sciences And Humanity Research
(ISSN – 2771-2141)
VOLUME 03 ISSUE 04 Pages: 72-79
SJIF IMPACT FACTOR (2021: 5. 993) (2022: 6. 015) (2023: 7. 164)
OCLC – 1121105677
Crossref doi Google Scholar WorldCat MENDELEY
Publisher: Oscar Publishing Services

Finally, blockchain and cryptocurrencies represent some of the most exciting and innovative technologies on the market today, and their use will continue to grow in the future. We hope that this article has been a useful introduction to the world of blockchain and cryptocurrencies, and that it will help you better understand their importance in the digital economy.

REFERENCES

1. Antonopoulos, A. M. (2014). Mastering Bitcoin: Unlocking Digital Cryptocurrencies. O'Reilly Media, Inc.
2. Crosby, M., Pattanayak, P., Verma, S., & Kalyanaraman, V. (2016). Blockchain technology: Beyond bitcoin. Applied Innovation, 2(6-10), 71-81.
3. Deloitte. (2018). Global Blockchain Survey 2018. https://www2.deloitte.com/content/dam/Deloitte/nl/Documents/innovatie/deloitte-nl-innovation-blockchain-survey-2018.pdf
4. Swan, M. (2015). Blockchain: Blueprint for a New Economy. O'Reilly Media, Inc.
5. Tapscott, D., & Tapscott, A. (2016). Blockchain Revolution: How the Technology Behind Bitcoin Is Changing Money, Business, and the World. Penguin.
6. Deloitte. (2018). Blockchain in Government: From Concept to Reality. Retrieved from
7. https://www2.deloitte.com/content/dam/Deloitte/au/Documents/Economics/deloitte-au-economics-blockchain-in-government-110318.pdf
8. Kshetri, N. (2018). Blockchain's roles in meeting key supply chain management objectives. International Journal of Information Management, 39, 80-89. https://doi.org/10.1016/j.ijinfomgt.2017.12.007
9. World Economic Forum. (2018). Blockchain Beyond the Hype: A Practical Framework for Business Leaders. Retrieved from http://www3.weforum.org/docs/WEF_Blockchain_Beyond_the_Hype_Report_2018.pdf
10. European Commission. (2018). Blockchain for Social Good: Towards a Human-Centric Approach. Retrieved from https://ec.europa.eu/futurium/en/system/files/ged/blockchain_for_social_good_report_0.pdf
11. Don Tapscott. (2017, May). How the blockchain is changing money and business [Video]. TED.
12. Casey, M. J., & Vigna, P. (2018). The Truth Machine: The Blockchain and the Future of Everything. St. Martin's Press.
13. Dilshodaxon Eshmuhammadovna Safarova, & Gulbahor Mahmudovna Gaybullayeva (2021). TO'QIMACHILIK KORXONALARI FAOLIYATINI RIVOJLANTIRISHDA MOLIYAVIY RESURSLARDAN FOYDALANISH YO'LLARI. Scientific progress, 2 (2), 1295-1300.

American Journal Of Social Sciences And Humanity Research
(ISSN – 2771-2141)
VOLUME 03 ISSUE 04 Pages: 72-79
SJIF IMPACT FACTOR (2021: 5. 993) (2022: 6. 015) (2023: 7. 164)
OCLC – 1121105677
Publisher: Oscar Publishing Services

14. Dilshodaxon Eshmuhammadovna Safarova, & Gulbahor Mahmudovna Gaybullayeva (2021). O'zbekistonda to'qimachilik korxonalarini rivojlantirishda davlat dasturlaridan foydalanish yo'nalishlari. Science and Education, 2 (6), 676-682.

15. Тешабаева, О. Н. (2022). МОЛИЯВИЙ МЕХАНИЗМ ВА УНИНГ СУВ РЕСУРСЛАРИДАН ФОЙДАЛАНИШ САМАРАДОРЛИГИНИ ОШИРИШДАГИ РОЛИ. Results of National Scientific Research International Journal, 1(3), 66-74.

16. Тешабаева, О. Н., & Исроилов, Х. И. Ў. (2022). Ўзбекистонда сув хўжаликлари тизимини бошқариш иқтисодий-молиявий механизмидаги ўзгаришларнинг асосий йўналишлари. Talqin va tadqiqotlar ilmiy-uslubiy jurnali, 4(4), 103-110.

17. Xomidov, Mirodiljon (2023). ANALYSIS OF THE CURRENT STATE OF INNOVATION IMPLEMENTATION IN IMPROVING THE COMPETITIVENESS OF INDUSTRY. Nazariy va amaliy tadqiqotlar xalqaro jurnali, 3 (2), 56-64. doi: 10.5281/zenodo.7699555.

18. Turgunov, M. "Issues of innovative approach and financing of innovative projects in rapid economic development." Экономика и социум 7 (2021): 151-159.

19. Turgunov, M., & Karimov, O. (2023). ISSUES OF DEVELOPMENT AND IMPROVEMENT OF THE INNOVATION STRATEGY OF ENTERPRISES. American Journal Of Social Sciences And Humanity Research, 3(02), 116-120.

20. TURGUNOV, M. M. U. (2022). The state of the food industry in Uzbekistan and some aspects of its management. THEORETICAL & APPLIED SCIENCE Учредители: Теоретическая и прикладная наука,(9), 156-162.

21. Тургунов, М. М. (2021). Совершенствование механизмов управления предприятиями пищевой промышленности. In НАУКА СЕГОДНЯ: ФУНДАМЕНТАЛЬНЫЕ И ПРИКЛАДНЫЕ ИССЛЕДОВАНИЯ (pp. 25-26).

22. Turgunov, M. (2021). STATE AND PROSPECTS OF THE REPUBLIC OF UZBEKISTAN IN INTERNATIONAL RATINGS OF INNOVATION DEVELOPMENT. Theoretical & Applied Science, (7), 37-42.

23. Turgunov, M. (2019). Mechanisms of effective management of corporations in the republic of Uzbekistan. In Теория и практика корпоративного менеджмента (pp. 123-124).

24. Muhriddin, T. U. (2021). Oziq-ovqat sanoati korxonalari faoliyatini boshqarishning o'ziga xos ayrim xususiyatlari. Nazariy va amaliy tadqiqotlar xalqaro jurnali, 1(2), 65-75.

25. Озиқ-овқат саноати корхоналари фаолиятини бошқаришнинг ўзига хос хусусиятлари. MM Turgunov. Biznes-Эксперт 1 (04.2022), 66-678

American Journal Of Social Sciences And Humanity Research
(ISSN – 2771-2141)
VOLUME 03 ISSUE 04 Pages: 72-79
SJIF IMPACT FACTOR (2021: 5. 993) (2022: 6. 015) (2023: 7. 164)
OCLC – 1121105677
Crossref doi Google Scholar WorldCat MENDELEY
Publisher: Oscar Publishing Services

26. OZIQ-OVQAT XAVFSIZLIGINI TA'MINLASHDA BOSHQARUVNING AYRIM MASALALARI. MM Turgunov. KIMYO, OZIQ-OVQAT HAMDA KIMYOVIY TEXNOLOGIYA MAHSULOTLARINI QAYTA ISHLASHDAGI DOLZARB MUAMMOLARNI YECHISHDA INNOVATSION TEXNOLOGIYALARNING AHAMIYATI

27. FARG'ONA VILOYATI TASHQI IQTISODIY FAOLIYATI HOLATI: MUAMMOLAR VA ISTIQBOLLAR. MM Turgunov.Namangan davlat universiteti ilmiy axborotnomasi 1 (2021-11), 190-194

28. ОЗИҚ - ОВҚАТ САНОАТИ КОРХОНАЛАРИ ФАОЛИЯТИНИ БОШҚАРИШ ВА РИВОЖЛАНИШ МЕХАНИЗМИНИ ТАКОМИЛЛАШТИРИШ. ММ Turgunov. ХОРАЗМ МАЪМУН АКАДЕМИЯСИ АХБОРОТНОМАСИ 1 (2021-11), 205-209

29. FARG'ONA VILOYATI TASHQI IQTISODIY FAOLIYATI HOLATI: MUAMMO VA TAKLIFLAR. MM Turgunov. И Л М И Й – Т Е Х Н И К А ЖУРНАЛИ 24 (2021-12), 188-191

30. Isroiljon o'g'li, K. S. (2022). PROBLEMS OF THE PROCESS OF DIGITAL TRANSFORMATION OF THE INDUSTRY OF UZBEKISTAN. Web of Scientist: International Scientific Research Journal, 3(6), 1748-1752.

31. Kodirov, S. I. U. (2022). RAQAMLASHTIRISH JARAYONINING O'ZBEKISTONDAGI HOLATI VA UNDA XALQARO REYTINGLAR AHAMIYATI. Nazariy va amaliy tadqiqotlar xalqaro jurnali, 2(11), 142-149.

32. Kodirov, S. (2020). Some issues of digitalization in the industrial sector of the economy. ISJ Theoretical & Applied Science, 12(92), 377-384.

33. Kodirov, S. (2021). Issues of business cooperation in the national economy of Uzbekistan. Экономика и социум, (7 (86)), 79-88.