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# Blockchain Strategy in Improving Transaction Security in The Sharia Capital Market

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**ABSTRACT**

*This study aims to investigate the strategy of blockchain technology in improving transaction security in the shariah capital market. Using an in-depth interview approach, this research explores the perceptions and understandings of various stakeholders, including industry experts, regulators, and shariah capital market practitioners. Qualitative research methods were used to gain in-depth insights into how blockchain can be applied to strengthen transaction security in the shariah capital market. From the research results, it is concluded that blockchain technology has tremendous potential and relevance in improving transaction security in the Islamic capital market, in this case the use of smart contracts makes a considerable contribution, in its implementation smart contracts can increase security, transparency and efficiency, In the context of the shariah capital market, the principle of "sharia can run automatically without third party intermediaries, this is very possible through smart contracts, not only that, the decentralized nature of the blockchain makes it very difficult to hack, and quite a lot of obstacles are passed to be able to hack it, and make a significant contribution to increasing transactions and security in the shariah capital market.*

**ABSTRAK**

*Penelitian ini bertujuan untuk menyelidiki strategi teknologi blockchain dalam meningkatkan keamanan transaksi di pasar modal syariah. Dengan menggunakan pendekatan in-deepth interview, penelitian ini mengeksplorasi persepsi dan pemahaman dari berbagai pemangku kepentingan, termasuk ahli industri, regulator, dan praktisi pasar modal syariah. Metode penelitian kualitatif digunakan untuk mendapatkan wawasan mendalam tentang bagaimana blockchain dapat diterapkan untuk memperkuat keamanan transaksi di pasar modal syariah. Dari hasil penelitian disimpulkan bahwa teknologi blockchain memiliki potensi luar biasa dan relavan dalam meningkatkan keamanan transaksi di pasar modal syariah, dalam hal ini penggunaan smart contract memberi kontribusi yang cukup besar, dalam implementasinya smart contarct dapat meningkatkan keamanan, transparansi dan efesien, dalam konteks pasar modal syariah prinsip" syariah dapat berjalan dengan otomatis tanpa perantara pihak ketiga hal ini sangat mungkin dilakukan lewat smart contract, tidak hanya sampai disana sifat blockchain yang terdesentralisasi membuatnya sangat sulit untuk di retas, dan cukup banyak hambatan-hambatan yang dilalui untuk bisa meretasnya, serta memberikan kontribusi yang cukup signifikan terhadap peningkatan transaksi dan keamanan di pasar modal syariah.*



## INTRODUCTION

In modern times that are rich in technology, all human activities can be facilitated by technological advances. This rapid technological development has a direct impact on business competition and employment, including in the field of financial technology (Muhammad Ikhsan Harahap & Andri Soemitra., 2023). With the rapid development of technology, Islamic finance is gaining importance in the global arena. The function of investment in the Islamic economic framework is clearly different from that in the traditional economic approach. On the other hand, investment in traditional economics is influenced by interest rates, in the perspective of Islamic economics, this is not relevant in Islamic investment (KhairinaTambunan., 2016).

Investments based on Islamic financial principles, which reject usury, illicit transactions, and excessive speculation, are now a key focus for individuals, financial institutions, and companies seeking to find investment alternatives that are in line with Islamic ethical and moral values (Nabilla nur cholifah, 2022).

In an Islamic perspective, investment can be compared to planting seeds and hoping that the results grow into fruit, so that you can enjoy the benefits of the plants that have been planted. As stated by Hayati (Imsar, 2023), It is known that Prophet Muhammad was involved in trading from a young age. Even his wife, Khadijah, as a capital owner, offered a partnership to Prophet Muhammad on a profit-sharing scheme. This led to the Prophet engaging in trade by managing other people's capital. The following surahs are related to investment , QS. al-Nisa [4]: 9.

وَلْيَخْشَ الَّذِينَ لَوْ تَرَكُوا مِنْ خَلْفِهِمْ ذُرِّيَّةً ضِعَافًا خَافُوا عَلَيْهِمْ فَلْيَتَّقُوا اللَّهَ وَلْيَقُولُوا قَوْلًا سَدِيدًا

*"Fear those who should leave after them weak offspring (whom) they fear for. So, fear Allah and speak with truthful speech (when it comes to protecting the rights of their offspring)".*

This verse emphatically instructs people to ensure that their descendants are not mired in a vulnerable state, both morally and materially. By implication, this verse encourages people to improve their economic conditions through long-term investments. The returns on these investments will be passed on to the next generation to ensure that they have adequate financial support until they are financially independent (Cholifah, 2022).

Investment is an integral part of muamalah fiqh, so the principle that "The basic principle in all forms of muamalah is that everything is permitted unless there is evidence that forbids it" applies (Djazuli. A 2006). This principle is applied to ensure that Islamic teachings safeguard the rights of all parties and prevent oppression between one another. Therefore, every investor is required to understand the rules and limitations of investment according to Islam including its process, purpose, object, and impact. However, not all forms of investment are allowed in Islam, especially those that involve deceit, lies, or involvement in activities prohibited by Islam (Rizki et al., 2023).

There are many forms of investment instruments in Indonesia, one of which is the capital market, in the context of sharia, which is referred to as the Islamic capital market, which is an inseparable part of the financial system based on Islamic sharia principles, which include the prohibition of usury (interest), transparency, and justice in economic activities (Handayani, 2018). The sustainability and growth of the Islamic capital market requires the latest innovations that can meet the demands of increasingly complex transaction security.

Indonesia's Islamic capital market is considered one of the world's leading capital markets because it can be the only capital market that combines Islamic stock investment and conventional stock investment. The existence of the Islamic capital market allows Muslims to invest in the capital market in accordance with the principles of sharia (Soemitra & Ammy, 2022). In Indonesia, the Islamic capital market currently relies on central servers to store and manage transaction data. Although these servers are equipped with various layers of security, they are often still vulnerable to security risks such as cyberattacks, data manipulation, and single-center risk. In addition, conventional server maintenance processes require regular updates and repairs that can result in downtime, increasing the risk of errors and allowing delays in transactions. When looking at the types of crimes that exist in the capital market, the

main focus often falls on information. Criminals in the capital market tend to have a high level of professionalism, which means they are not clueless people (Asril, 2019).

In recent years, Blockchain technology has emerged as an increasingly popular topic of conversation, due to the fact that it is a technological innovation that provides new options in the acquisition and exchange of information. The main use of Blockchain technology today is mainly focused on the cryptocurrency sector. A well-known example is Bitcoin, which is a form of digital currency that uses Blockchain technology. The emergence of bitcoin as a transaction and investment tool in cyberspace is interesting to study (Hamid et al., 2021). Even personally, the author was familiar with Bitcoin before Blockchain technology. This is natural because Bitcoin, which was introduced by Satoshi Nakamoto around 2008, subsequently triggered an explosion in popularity and extensive research on Blockchain technology was conducted around the world (Saputra & Darma, 2022). But actually, Bitcoin and Blockchain technology are not a completely new phenomenon. Bitcoin was indeed the first digital currency to be widely accepted and adopted. However, there have been other cryptocurrencies before it, and there have been many failed attempts to apply distributed ledgers to digital credit cards encrypted online in the 1990s (Scott, 2017).

One of the key factors in Bitcoin's success is the utilization of distributed ledgers as the foundation of Blockchain technology. It is this unification between Blockchain technology and its application in the global financial industry that makes it increasingly discussed worldwide. As a potential solution to improve transaction security in various financial sectors. Blockchain, or block chain, is a decentralized technology that provides clarity and security through the use of distributed block chains to record transactions. However, the use of blockchain in the Islamic capital market is still limited and has not been fully explained in the context of Islamic transaction security (Utomo, 2022).

On the other hand, blockchain technology offers a different approach when it comes to security. Blockchain uses a decentralized system where transaction data is stored on a number of globally distributed nodes or computers (Nor, Rahman, Rahman, & Abdullah, 2017). The security of blockchain is enhanced by its decentralized nature, which makes it very difficult for any unauthorized party to manipulate data or cause damage. The process of server maintenance in the context of blockchain is also different. Due to its decentralized nature, updates or changes to the blockchain require the consensus of the majority of nodes on the network, so the risk of downtime is minimized. In addition, blockchain security is backed by strong cryptography, including the use of private and public keys, which makes transactions difficult to manipulate (Meth, 2019).

In sharia principles, it has been explained that one of the elements contained therein is the aspect of transparency, in its application Blockchain technology Blockchain technology has the ability "To overcome some of the challenges faced by the Islamic capital market Security sector today, first, with a high level of transparency and auditing, Blockchain technology allows market participants and regulators to monitor transactions more accurately. Secondly, this technology can reduce the risk of human error and fraud in financial transactions as all transactions are automatically recorded and cannot be manipulated (Pangestu, 2023).

Islamic capital markets are faced with increasingly complex transaction security challenges, such as the risk of fraud, data manipulation, and lack of transparency that can harm investor confidence (Asril, 2019). This research will aim to explore the extent to which blockchain can provide a solution to the challenges of transaction security in the Islamic capital market. Therefore, "This research is supported by the analysis of related studies from

phenomena that occur in various countries, such as research conducted by Gafur, et al. (2022) entitled 'Modern Marketing Model of Islamic Banking with Blockchain Technology'. The phenomenon of using dualism of Islamic banking accounts and conventional banking in Indonesia, and research conducted by Bahauddin (2019) entitled "Blockchain and smart contract applications to support sharia crowdfunding-based MSME supply chain finance", as well as research conducted by Musana (2023) entitled "Optimizing Zakat Management with Blockchain Technology".

The research that the author conducted differs substantially from previous research in terms of subject, location, and subject matter. the author did not find any similar research that had been done before. Therefore, the author can conclude that this research is truly original and free from plagiarism. This research will dig deeper into the application of blockchain technology strategies to improve transaction security in the Islamic capital market, focusing on sharia provisions.

The Islamic capital market refers to capital market activities that comply with the principles of Islamic law. Thus, in general, the Islamic capital market involves securities trading and public offerings that are conducted in accordance with sharia principles (Ramadani et al., 2021). The implementation of blockchain strategies in Islamic capital markets should take these Shariah principles into account, ensuring that such technological innovations are in line with the values of Islamic finance

Capital market crime is one of the growing forms of crime. In capital market activities, crime can generally be categorized into two types : fraud and market manipulation (Asril, 2019). Usually, crimes in the capital market are committed professionally by "white collar" perpetrators, so victims often do not realize that they have become victims of such crimes (Iskandar, 2017). Kejahatan in the capital market has its own characteristics. One of them is that the "goods" targeted by criminals are often information (Dadang et al., 2020). In addition to these two characteristics, there are also other characteristics that distinguish it from other crimes, namely the difficulty of proving it and the impact of the offense which can be very detrimental and extensive (Dan & Di, 2016).

Blockchain is a decentralized electronic record-keeping system designed to create cryptographic records that are much more secure and unmodifiable. This includes transactions of value such as currency, goods, property and more. Blockchain facilitates secure and transparent access without the need for complex or costly procedures, thus increasing effectiveness and efficiency (Efanov & Roschin, 2018). Blockchain technology is one of the most popular technologies that allows transactions to be more transparent than traditional centralized systems (Mahmood et al., 2022).

Transparent ledger in blockchain refers to its ability to perform its function in blockchain technology refers to the capacity to record and store transactions in an open and verifiable manner across the network. This concept emphasizes the importance of transparency and clarity as a basis for strengthening trust and reducing the risk of data manipulation (Swan et al., 2017).

Smart contracts are computer programs that run on a blockchain network and automatically execute agreements based on predetermined conditions. Smart contracts help the process of exchanging money, shares, and property. Currently, there are many industries that use smart contracts, such as the business industry that records financial services, the library archiving industry, even the insurance industry and the government (Fauziah et al., 2020).

This theory highlights how decentralization can strengthen network security and resilience to cyberattacks. Decentralization can be a key factor in enhancing the security of

Islamic capital markets by reducing the risks associated with a single center and providing higher confidence to investors (Swan et al., 2017).

Blockchain security theory discusses the cryptographic concepts underlying a blockchain technology, explaining how private and public keys, as well as hash functions, are used to protect the security of transactions. Blockchain security is backed by strong cryptographic technology and is decentralized, making transactions difficult to manipulate**.**

## RESEARCH METHODS

This research utilizes qualitative methods in this study to investigate the implementation of blockchain technology strategies in Indonesia in enhancing transaction security in the Islamic capital market. In this study, the researcher adopted the purposive sampling method, in which relevant subjects were purposively selected. They were selected because they have a comprehensive understanding of teaching in the field of Investment, as well as adequate knowledge of blockchain technology (Bahanan & Al-Utsmani Bondowoso, 2023). Participants in this study will consist of several subjects, namely academics and regulators from several institutions, as for the keys informants that the author chose from 3 agencies, namely Mr. M. Pintor Nasution M.Si. AWP as Head of the Indonesia Stock Exchange Office, North Sumatra, Mr. Reza Sadat Shahmeini as Indonesian Sharia Capital Market Specialist, Prof. Dr. Andri Soemitra, M.A. as Lecturer in Capital Markets and Investment, Mrs. Pandu Sastrowardoyo as Founder of the Indonesian Blockchain Association. In this research, there is data collection through in-depth interviews and participatory observation. In-depth interviews are utilized to gain an in-depth understanding of the views, opinions, and experiences of lecturers and investors regarding the application of blockchain technology in the context of the Islamic capital market. Meanwhile, participant observation allows researchers to directly observe the application of blockchain technology in enhancing security in the Islamic capital market. The data collected will be analyzed using qualitative analysis methods.

## RESULTS AND DISCUSSION

### *Strategies to Improve Transaction Security in the Islamic Capital Market*

Blockchain technology uses resistant cryptographic algorithms and the implementation of a decentralized data distribution consensus.Blockchain technology also implements very strong cryptography to protect data. Each transaction is encrypted and stored in a block that is connected to the previous block, making it difficult to change or delete. making it a difficult challenge for unauthorized parties to manipulate or change transaction data, this serves to ensure security as well as "accuracy and authenticity of data. In the context of Islamic capital markets, this helps reduce the crime rate of cyber-attacks, data manipulation, and fraud that can jeopardize customer funds.

In the context of Islamic financial transactions, this technology can be used to ensure compliance with Islamic principles such as the prohibition of usury, the prohibition of excessive speculation (maysir), and the principle of fairness in transactions. Of course, the use of blockchain technology also has a positive effect on the transparency of the Islamic capital market trading mechanism itself. Blockchain provides transaction evidence that is open to verification by all parties involved, promoting increased customer confidence in the integrity of the Islamic capital market. Blockchain transparency also supports external auditing and reporting processes that are compliant with Shariah principles.

In this Research Study, it was found that the utilization of blockchain technology can help uphold Shariah principles in Islamic capital markets. The transparency and security provided by blockchain technology contribute to ensuring that financial transactions comply with Islamic law, including the prohibition of usury and speculation. This instills confidence in customers regarding the Islamic capital market's adherence to the elements of Shariah.

In the Islamic capital market itself, everything is structured and systematic, starting from the determination of the list of sharia securities under the OJK based on the DSN-MUI fatwa and the technicalities of transactions that are allowed according to applicable sharia principles, I myself still haven't studied this Blockchain too deeply, if this technology can make it easier for the capital market, especially the Islamic capital market, to continue to improve services and investor confidence, then with the potential of blockchain technology which contains the basis of transparency, which is included in sharia principles, this can also increase the accountability of this Islamic capital market, so that it can increase the number of investors and transactions in Indonesia, however, this technology needs to be studied more deeply with the parties and experts in their fields so that the potential that can be used is not out of line or misused in the future (Interview informant by Mr. Reza).

In addition, blockchain technology also increases the accountability of the Islamic capital market industry. In the current transaction mechanism in the Islamic capital market, which is still relatively conventional, data and information are still scattered and fragmented across various related parties. However, with the adoption of blockchain technology, transaction data and information can be integrated into one secure and verifiable distributed database, with each transaction recorded in a decentralized block chain ensuring that all parties have access to the same information, and open to the public, the audit process becomes more efficient and transparent. This is important in the context of Islamic capital markets, where compliance with Shariah requirements requires a high level of transparency. This allows investors and guarantors to track and verify the transaction process. This enhanced accountability can add to investors' sense of security and confidence in the Islamic capital market industry.

In the Islamic capital market itself, the transaction mechanism in the secondary market is that transaction data is technically entrusted to securities companies (dealers) which will then be recorded in the IDX system and there are several other parties that function as clearing facilitators and securities guarantors, so that transactions on information that cannot be traced by various parties can increase the risk of data manipulation or hacker attacks on centralized systems or servers from the parties involved. In addition to the vulnerability of security transactions in the capital market also requires quite expensive maintenance and monitoring expenses because in it there needs to be supervision from various parties and this is also charged to investors as a transaction fee for the operation of related parties, as explained by the informant, Mr. M.Pintor

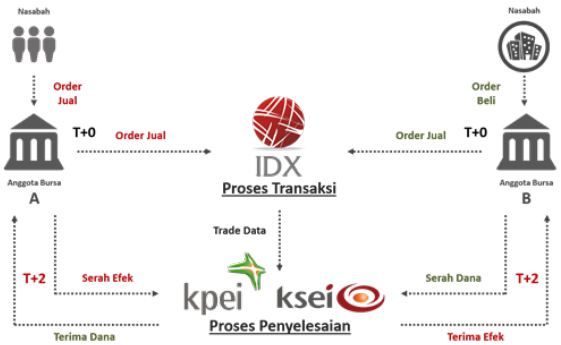

**Figure 1. Conventional multi-system stock trading mechanism**

*Source: IDX.CO.ID, 2024*

In the current capital market transaction system mechanism, there is the potential for asymmetery information and moral hazard. Multi-system transaction mechanisms involving various systems and many parties ranging from investors, stock exchange members (securities companies/dealers), Indonesia Stock Exchange, SRO Supervision by related institutions makes it difficult to ensure the truth and accuracy of each stage of the transaction. Centralized data systems tend to facilitate this condition. This practice opens up opportunities for dishonesty and negligence that can harm the independent institution or organization, this is very necessary to avoid.

Not only that, the multi-system transaction process that involves many parties makes it inefficient and requires a long time until the transaction is completely processed.

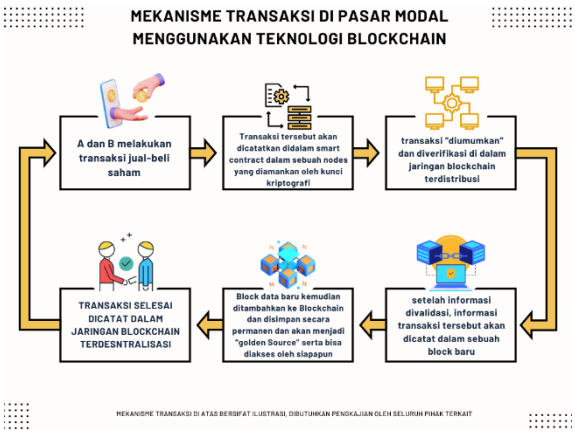


**Figure 2. Transaction Mechanism Using Blockchain Technology**

Source: Telkom University Alumny Forum, 2024

Blockchain serves as a connected data repository that requires several key databases to be input into the system. These databases include: (1) buyer data, (2) seller data, (3) buy-sell transaction reports, and (4) transaction distribution reports. In the process, the collected data will be verified online before being inputted into the blockchain platform (Urfiyya, 2021). All financial institutions use a ledger to ensure accurate recording of all financial transactions. With this ledger, the amount of incoming and outgoing funds can be closely monitored. In the Islamic capital market itself, Self Regulatory Organizations (SROs) are responsible for recording every transaction that occurs.

Blockchain technology eliminates the need for intermediaries and reduces risk (single point of failure) by distributing transaction ledgers across the network of computers involved, where each ledger is identical (Ramadhani et al., 2024). Each transaction that occurs must be broadcast and validated by all computers that have a copy of the ledger before it can be considered valid. Once verified, the transaction is placed in encrypted blocks, which are then permanently linked to the previous and subsequent transaction blocks. In simple terms, this is also explained in Figure 2 regarding the blockchain transaction mechanism. Through the distributed and integrated transaction recording system in the encrypted blockchain, the

platform achieves a very high level of security. Hacking this technology requires extraordinary skills.

In hacking the blockchain network, there are many obstacles that hackers must overcome and it seems impossible to pass, the obstacles that are often questioned are located in the encryption of transaction blocks (Yaga et al., 2019). In hacking a single transaction, one must also successfully hack the blocks of transactions that lie before and after it. In other words, this implies that one must be able to hack all the transaction blocks, as they are interconnected. That's why blockchain is able to provide a very high level of security, almost to the level of being "unbreakable" for data manipulation or other hacks.

***Data Transparency and Accountability***

One of the main advantages of blockchain is transparency and accountability. Every transaction made on the blockchain is visible to all network participants, ensuring that all parties have access to the same information (Desy Apriani et al., 2023). This increases trust between parties and reduces the risk of fraud. In the Islamic capital market, transaction security is very important.

The financial industry, especially the capital market, has a main basis that must exist, namely trust (trust) if it is lost from the industry, it is certain that it will not last long, in this case transparency is the main point in creating a sense of trust (trust) to investors, if a technology in this case may be blockchain can facilitate this without third party intermediaries so that there is minimal risk of manipulation or fraud, this can certainly be a transformation in the financial industry, especially the Islamic capital market (Interview by informant Mr. Andri).

By using blockchain, every transaction made will be recorded in blocks that are connected and cannot be changed. This means that any change or manipulation of data will be very difficult to do without getting the approval of the majority of the blockchain network (Arwani et al., 2024). Authenticity and integrity of transactions are key principles in the Islamic capital market. With blockchain's accountability feature, every transaction entered into the system will be recorded in a block that is connected to the previous block, so the integrity of the data is guaranteed to remain intact and cannot be manipulated. This provides assurance to investors that their transactions are securely protected and will not be misused.

***Use of Smart Contracts***

Smart contracts are codes (memorandum of agreements) that are executed automatically when certain conditions are met. In Islamic capital markets, smart contracts can be a very effective solution to comply with sharia principles and improve the security of transactions in Islamic capital markets, for example in complying with sharia principles smart contracts can be programmed to comply with sharia principles in every transaction. For example, smart contracts can be programmed to ensure that every investment transaction complies with the prohibition of usury or speculation.

From the results of the interview by the informant, Mr. Pandu, the application of smart contracts is not limited to sharia principles but can also be implemented in improving transaction security in the Islamic capital market, smart contracts can be programmed to reduce the risk of human error and transaction manipulation. Since they are executed automatically according to a predefined code, there is no room for human error or malicious acts in the execution of the contract. This reduces the risk of errors and allows transactions to be carried

out more quickly and efficiently, while increasing investor confidence and maintaining transaction security.

***Tracking System and Low Cost***

In Islamic capital markets, it is important to be able to track asset ownership accurately and in real-time. By using blockchain, each asset can be represented in the form of a digital token associated with its ownership. blockchain offers a very high level of data security. Each block in the blockchain chain is encrypted in the form of a unique code (hash), ensuring that data cannot be altered or deleted undetected. In addition, since each transaction is recorded in a block that is connected to the previous block, data integrity is guaranteed. This creates a highly secure and reliable system for protecting data and transactions. This allows investors to track and verify the ownership of their assets easily and transparently.

From the results of interviews by informants, namely Mr. Pandu, said that Block-chain consists of blocks connected by a chain so that any data contained in the block is very easy to track because it is connected via a chain between one block and another, now in the context of the capital market itself I see something similar to the form of tokens that have been widely run in the blockchain network refracting a certain asset ownership, it's just that in the capital market it is called a digitally created share sheet. In the blockchain system itself, a real asset ownership represented in the form of a token has many advantages, besides we can track the existence of these assets. This tokenization serves to facilitate and accelerate transactions on ownership of certain assets so as to reduce costs incurred if transactions are made in cash.

Blockchain can also reduce the cost and time required to make transactions. By eliminating intermediaries, blockchain allows transactions to be made directly between the buying and selling parties, this can reduce intermediary costs and speed up the transaction process. In addition, the automated verification process performed by blockchain can speed up the time taken to complete a transaction.

***Shariah Principles Compliance***

Complying with sharia principles in the financial system, especially in Islamic capital markets using blockchain technology, is a very important aspect in the context of Islamic monetary economics. Shariah principles, which prohibit usury, gharar, and maysir, aim to bring about fairness, sustainability, and honesty in the financial system. In the application of blockchain technology, special attention must be paid to ensure that the systems developed and the transactions that take place remain compliant with sharia principles.

The results of the interview by Mr. Andri said that complying with sharia principles is an important factor in the development and implementation of Islamic capital markets that use Blockchain technology in the context of Islamic economics. By designing a system that takes this into account, as well as through the supervision of the sharia authority in this case the DSN-MUI Fatwa. With the implementation of clear standards and a deep understanding of sharia principles, Blockchain technology has the potential to strengthen a financial system that is aligned with these principles. Close cooperation between various parties is needed, which is the key to success in implementing an Islamic capital market system based on blockchain technology that complies with sharia principles. This can make the Islamic finance industry experience quite rapid growth in the future, not only providing benefits for the community in the future, but also can encourage and support a sustainable Islamic economy. However, the

industry still faces several challenges that need to be addressed such as lack of transparency, risk of fraud, and inefficiency of sharia principles, which are based on Islamic law.

To ensure compliance with sharia principles, it is imperative to involve authorized sharia authorities, such as Fatwa DSN-MUI in the context of Islamic capital markets. These authorities can provide guidance, fatwa, and certification regarding the application of blockchain technology in the Islamic monetary economy. The supervision and endorsement by authorized sharia authorities can increase public confidence in a better blockchain-based financial system (Pangestu, 2023). There are so many prohibitions that are not allowed based on sharia principles, this is also clearly stated in Islamic law, gharar buying and selling is included in the prohibited category. With the basis of the words of the Prophet Muhammad Shallallallahu 'alaihi wa sallam in the hadith of Abu Hurairah which reads:

نَهَى رَسُولُ اللَّهِ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ عَنْ بَيْعِ الْحَصَاةِ وَعَنْ بَيْعِ الْغَرَرِ

*"The Messenger of Allah (peace and blessings of Allaah be upon him) forbade buying and selling al-hashah and buying and selling gharar."*

In the context of buying and selling transactions involving gharar, there is an element of taking unauthorized profit from other people's property. This is contrary to Allah's prohibition against the unauthorized taking of other people's wealth, as expressed in His word:

وَلَا تَأْكُلُوا أَمْوَالَكُمْ بَيْنَكُمْ بِالْبَاطِلِ وَتُدْلُوا بِهَا إِلَى الْحُكَّامِ لِتَأْكُلُوا فَرِيقًا مِنْ أَمْوَالِ النَّاسِ بِالْإِثْمِ وَأَنْتُمْ تَعْلَمُونَ

*"And let not some of you eat of the property of others among yourselves by means of unlawful means, and let not your property be brought before a judge, that you may eat of the property of others by way of sin, while you know."* (Al-Baqarah/2 :188).

These principles are intended to maintain justice, avoid exploitation, and prevent economic uncertainty that could potentially harm society. Shariah principles, which emphasize the importance of fairness and prudence in business, serve as a foundation to ensure that every financial transaction is conducted fairly. In an Islamic capital market environment that bases its operations on blockchain technology, this hadith serves as a guideline for developers and practitioners to ensure compliance with sharia principles. Blockchain technology, with its transparency, can reduce uncertainty in transactions and avoid gambling and speculation practices that are contrary to sharia principles. Therefore, the application of blockchain technology supports the creation of an Islamic capital market that complies with sharia principles, maintains integrity, and ensures fairness in economic transactions.

## CONCLUSIONS

This research provides a perspective on blockchain strategies in enhancing transaction security in the Islamic capital market. By using a qualitative approach, the researcher was able to investigate the viewpoints of regulators and academic practitioners regarding the utilization of blockchain technology in improving transaction security in the Islamic capital market. From the results of the research, it is concluded that blockchain technology has a lot of potential and relevance in improving transaction security in the Islamic capital market and contributes

significantly to increasing security in the capital market, the use of blockchain in the Islamic capital market can increase transparency, accountability, tracking systems and cost efficiency, based on the sharia principles contained in the blockchain itself. Blockchain technology through smart contracts opens up many opportunities to increase the number of transactions in the Islamic capital market, where trust is the main capital, through transparent and accountable transaction mechanisms that will add value to the integrity of the Islamic capital market industry.

On the other hand, the high cost of server maintenance in the capital market itself is an important point for blockchain to be able to minimize server maintenance costs to be cheaper and more efficient than conventional servers in general. Likewise, the multi-system transaction mechanism involves many parties so that it is difficult to track, with the decentralized nature of the blockchain eliminating these intermediaries so that transaction times are faster and can be tracked, the decentralized nature of this blockchain, connected from one block to another with the help of this chain (chain) also makes it more difficult and many obstacles to hacking this system.

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