

The Utilization of Blockchain Technology in Waqf and Charitable Endeavors: The Finterra Waqf Chain Platform in Malaysia as a Case Study

استخدام تقنية البلوكتشين في الأوقاف والأعمال الخيرية منصة Finterra Waqf Chain بماليزيا نموذجاً

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Abstract:

This study aims to explore the advantages and opportunities presented by blockchain technology in the realms of waqf (Islamic endowments) and charitable activities, particularly in financing, managing assets, and overseeing waqf-related investments. Furthermore, it seeks to highlight a specific blockchain product developed to serve waqf and charitable purposes: the Finterra Waqf Chain platform in Malaysia.

The study concludes that integrating this technology can foster trust and broaden access to a diverse investor base within the Islamic waqf ecosystem. It facilitates the collection of necessary funds for developing and financing these endowments through crowdfunding platforms. Additionally, the decentralized nature of blockchain stands out as a crucial element in revitalizing waqf, transforming it into a sustainable source of returns that can be reinvested in enhancing ancient endowments. Blockchain can also be employed for preserving and archiving Islamic waqf documents worldwide, managing their assets and investments, regulating contractual relationships between waqf entities and their beneficiaries as well as other stakeholders, monitoring waqf growth, building integrated databases, and bolstering transparency.

Keywords: Blockchain, Fintech, Crowdfunding Platform, Waqf and Charitable Works, Finterra.

ملخص:

تهدف هذه الدراسة إلى التعرف على مزايا وفرص استخدام تقنية البلوكتشين في الأوقاف والأعمال الخيرية والتي يمكن الاستفادة منها لتمويل وإدارة الأصول والاستثمارات الوقفية، كما تسعى هذه الدراسة إلى تسليط الضوء على منتج من منتجات البلوكتشين والتي تم تطويره لخدمة الأوقاف والأعمال الخيرية وهي منصة Finterra Waqf Chain بماليزيا.

وقد توصلت الدراسة إلى أنَّ توظيف هذه التقنية سيمكن من توفير عامل الثقة والوصول إلى قاعدة عريضة من المستثمرين في منظومة الأوقاف الإسلامية، حيث تساعد على جمع الأموال اللازمة لتطوير وتمويل تلك الأوقاف من خلال منصة التمويل الجماعي، علاوة على أنَّ لا مركزية هذه التقنية هي أحد أهم الأمور اللازمة لإنعاش الوقف وتحويله إلى مصدر لعوائد يمكن الاستفادة منها في تطوير الأوقاف القديمة. كذلك يمكن استخدام البلوكتشين في حفظ وأرشفة وثائق الأوقاف الإسلامية حول العالم وإدارة أصولها واستثماراتها، وتنظيم العلاقات التعاقدية للجهات الوقفية مع مستفيديها ومختلف الأطراف من جهة أخرى، ورصد نمو الأوقاف وبناء قاعدة متكاملة وتعزيز الشفافية فيها.

كلمات مفتاحية: البلوكتشين، التكنولوجيا المالية، منصة التمويل الجماعي، الأوقاف والأعمال الخيرية، فنتيرا.

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1 .INTRODUCTION

The twenty-first century has witnessed an unprecedented revolution in information and communication technology, surpassing all expectations. This technology has become the primary driver of social, economic, and political change on a global scale, permeating every facet of life. It has evolved into an indispensable tool of the modern era across numerous fields and domains. Consequently, it has become imperative for companies and institutions across various sectors to embrace the world of technology, knowledge, and communications.

If contemporary technological advancements aid in improving and developing the performance of individuals and organizations in diverse aspects of life, their role in charitable and waqf sectors is particularly significant. They activate and innovate waqf practices in line with societal needs and circumstances in every time and place, ensuring the enduring civilizational and developmental role of waqf in communities. In this context, social digital innovation represents novel and authentic ideas intended to advance waqf through the tools of the Fourth Industrial Revolution. This involves organizing its management and policies to expand the concept of waqf beyond traditional forms, paving the way for a forward-thinking waqf system that anticipates new domains. This approach yields authentic Islamic solutions rooted in principled foundations.

In this regard, the waqf chain system serves as a viable model for waqf innovation, adhering to established guidelines and principles while achieving desired outcomes through creative methods to develop and activate waqf in Islamic societies.

The waqf chain system exemplifies one of the most important modern social digital innovations. It is the first innovative platform in crowdfunding and waqf development, addressing the gap between the global value of waqf assets—estimated at a trillion dollars—and total income, along with the anticipated added value. Blockchain technology can be leveraged in the waqf sector across various areas, such as information management, privacy, decentralization, and executing smart contracts via creative programming. This helps overcome governance and technological innovation challenges in charitable and waqf work. Such technologies open broad horizons for social solutions under the oversight of banks and Sharia boards, propelling global investment in waqf properties to enhance their economic, societal, and humanitarian developmental roles. Moreover, blockchain solutions for waqf can grant donors financial freedom by making transactions more efficient and transparent. Users can also engage in a range of activities through their ecosystems.

Importance of the Study

The Islamic waqf sector is an integral part of the Islamic economic system and has achieved notable successes. To sustain this success, it must keep pace with evolution and progress. Thus, it is crucial for waqf institutions to deliver services in ways that align with this transformation, interact with emerging developments, occupy space in this open technological arena, and engage with technology more

effectively and efficiently. This study, therefore, reveals the aspects illustrating the interaction of the waqf and charitable sectors with blockchain technology.

This study constitutes a theoretical scientific review of the importance of employing blockchain technology in developing waqf and charitable systems. Seizing this opportunity, the researcher aims to stimulate interest in this vital topic and promote its utilization in waqf and charitable institutions. The study's significance also lies in enriching the Arabic library with a new scientific contribution on blockchain technology and its role in financing and managing waqf and charitable works, exploring potential benefits to add a novel dimension to waqf and charitable system development. Its importance further stems from its findings, which contribute to efforts aimed at advancing this sector in accordance with digital changes employed across various fields.

Main Objective of the Study

The research seeks to examine the interaction of the waqf and charitable sectors with digital technological variables and their employment toward transitioning to a digital economy via digital platforms. This aims to create a qualitative leap in the sector, enhancing service quality, developing resources, activating investments, and maximizing social impact. Additionally, the research aims to familiarize readers with the concept of fintech and blockchain technology, their applications in waqf and charitable fields, their advantages, and their role in developing the waqf sector.

Sub-Objectives

This study strives to achieve the following objectives:

- Shed light on the concept of blockchain technology and fintech.
- Understand the extent to which fintech contributes to developing the waqf and charitable systems.
- Examine the role of blockchain technology in growing waqf sector resources.
- Identify the key opportunities blockchain technology offers in the waqf and charitable sectors.
- Review Malaysia's experience in using blockchain technology in waqf and charitable fields.

Problem Statement

Many waqf administrations and charitable institutions lack administrative efficiency, transparency, and accountability. There is an urgent need for innovative, Sharia-compliant investment methods to ensure high returns for economic and social development. In this vein, the Fourth Industrial Revolution offers substantial opportunities for societies to achieve high rates of economic, social, and humanitarian development overall. With its rapid pace, broad scope, and profound boundaries, this revolution compels us to rethink how our countries evolve. It can be positively harnessed to serve waqf and charitable institutions, contributing to new economic development opportunities. However, this depends on countries'

capabilities, their technological endowments, ability to develop and employ systems, enhance employee skills, and equip them with experiences to handle these technological advancements.

In light of the above, the research problem revolves around the following main question: To what extent can blockchain technology be utilized to develop the non-profit sector?

Sub-Questions

Stemming from the main question, the following sub-questions can be posed:

- How can blockchain technology enhance the growth of the waqf and charitable sectors?
- What aspects can the waqf and charitable sectors benefit from in using blockchain technology?
- What methods can be used to deliver charitable and waqf works via blockchain technology?
- What are the most important opportunities blockchain technology provides for waqf development?

Research Method

To test the preceding hypotheses and achieve the research objectives, given the multifaceted aspects of this research problem and building on the reviewed material, the deductive method has been employed, utilizing description and analysis tools. The research clarifies elements related to blockchain and fintech technologies and their roles in developing the waqf ecosystem.

Previous Studies

Based on the researcher's knowledge and available references, there is a scarcity of writings addressing the study's topic, with insufficient research or studies, except for a few that touched on some aspects without comprehensively covering the subject in most cases. Below are the most relevant studies:

- Study by (Ezz El-Din: 2008) – A paper presented at the "Third Gulf Charitable Work Conference" titled: "How Can We Collect Donations Through the Virtual World on the Internet"?

The author urged charitable associations in Gulf Cooperation Council countries to adapt to advanced concepts introduced by the Internet and keep up with technological progress in communication and information systems, thereby contributing to increasing and developing financial resources for charitable associations.

- Study by (Abdullah: 2008) – A paper published in *Awqaf Journal* titled: "Globalizing Ongoing Charity: Toward a Global Agenda for the Waqf Sector"

The researcher discussed the importance of developing waqf work in Islamic countries, transitioning it from local spheres to international spaces amid the widening knowledge and technology gap between them and a few industrialized

nations. The researcher highlighted reasons for waqf's confinement to narrow national circles, failing to encompass its vast social experience and enormous material potential.

- (Jo Barraket, 2005) – A paper published in the Australian Journal of Emerging Technologies and Society titled: "Online Opportunities for Civic Engagement? An Examination of Australian Third Sector Organisations on the Internet"

The researcher addressed Australia's third sector and its key challenges, including fundraising. In this context, the study attempted to provide an innovative method and technology enabling non-profit, waqf, and charitable organizations to easily and quickly mobilize funds from donors through the advantages offered by modern information systems and Internet communication technologies.

- (Hazem Sassi, 2018) – An article published in the Global Islamic Economy Magazine titled: "Benefiting from Waqf Using Blockchain Technology – Finterra Platform as a Model"

This paper aimed to study the waqf platform via blockchain technology, considered the first waqf platform beyond theories and literature. It also sought to describe and analyze the steps involved in this platform.

- (Rizal Mohd Nor: 2017) – A paper published at the International Conference on Software and Automated Media at University Utara Malaysia titled: "Blockchain Sadaqa Mechanism for Disaster Aid Crowdfunding"

This study aimed to explore how to endow funds and donate through an innovative crowdfunding platform. The paper also addressed the advantages of using blockchain technology, such as information management, privacy, decentralization, and smart contract execution.

Despite the comprehensiveness of these studies in examining, analyzing, and discussing the impact of technological evolution on the non-profit sector, they did not cover all aspects of the current study. Therefore, this research represents a new addition to this field of knowledge. The researcher hopes it covers an important aspect that significantly contributes to waqf sectors in Islamic countries benefiting from these modern technologies.

2- Blockchain Technology

Blockchain emerged as a decentralized, open-source database—one of the key outcomes and achievements of digital currencies—enabling two or more parties to conduct financial or commercial transactions without the need for a third party to establish trust. This database allows everyone to access its data and verify the information contained within it. Individuals connected to the internet can confirm the validity of their transactions and record them in their own ledgers. They aggregate transactions over a specified period into a block, which is then sealed with a tamper-proof stamp. Each transaction block is linked to the block from the previous period. In a blockchain banking system, transactions are recorded across multiple computers connected via a network and reconciled by numerous individuals.

Blockchain offers non-falsifiable digital proof of ownership, along with a complete record of the ownership chain.

First: Elements of the Blockchain System

The blockchain consists of four primary elements: the block, information, hash, and timestamp. Collectively, these form the blockchain, and they can be explained as follows¹:

–**The Block**: This represents the building unit of the chain, comprising a set of operations or tasks to be performed or executed within the chain. Examples of blocks include money transfers, data registration, status tracking, or similar activities. Typically, each block accommodates a specific amount of operations and information, not exceeding its capacity until the internal operations are fully completed. A new block is then created and linked to it. The primary goal is to prevent fictitious transactions within the block that could freeze the chain or hinder the recording and completion of transactions.

–**The Information**: This refers to the sub-process occurring within a single block, or the individual command executed inside the block, which, together with other commands and information, constitutes the block itself.

–**The Hash**: This is akin to the distinctive DNA of the blockchain, sometimes referred to as the "digital signature." It is a code generated through an algorithm within the blockchain program, known as the "hashing mechanism".

–**The Timestamp**: This is the time at which any operation within the chain was performed.

Second: Principles of Blockchain Operation

The blockchain system operates according to three main principles, which form the foundation upon which the system is built and through which all individual transactions are completed:

–**The Open Ledger**: All information within the blockchain is accessible to everyone. All participants in the chain can view each other's holdings. For instance, if the chain involves money transfers, everyone in the chain can see everyone else's funds.

–**The Distributed Database**: This principle aims to eliminate centralization, as there is no single entity, server, or device controlling the blockchain. Instead, the chain is distributed among all participants worldwide. Anyone can download the chain, view it, and participate in it. This principle serves as one of the security elements of the chain.

¹ Ihab Khalifa, Blockchain: The Upcoming Technological Revolution in Finance and Management, Academic Papers, Issue 3, Future Center for Advanced Research and Studies, Abu Dhabi, UAE, March 2018, p2.

–**Mining:** This involves using computer processing power to search for the correct hash that distinguishes a transaction, ensuring its successful completion. Millions of miners worldwide perform complex mathematical operations on their devices to obtain the correct hash that links this transaction to the previous one in the chain and differentiates it from other transactions occurring within the blockchain.

Third: Applications of Blockchain

Blockchain is utilized in various fields, not limited solely to transferring digital or traditional currencies. This can be illustrated through several points:

–**Registering Properties:** One of blockchain's functions is enabling individuals to register their properties, regardless of type—whether real estate and land, jewellery and precious stones, cars and personal belongings, or patents and intellectual property rights. Individuals can then sell these via the blockchain system or conduct subsequent transactions on them.

–**Documenting Transactions:** This encompasses any transaction, whether personal between individuals or within a company, governmental, or non-governmental institution. Blockchain acts as an open, distributed digital registry, allowing everyone to enter all data, whether governmental procedures, production line tracking in a factory, flight paths of airplanes or oil tankers, as well as recording sales and purchases, ownership transfers, customer service monitoring, and all transactions between any two individuals in any field. This facilitates detecting loopholes, combating corruption, and monitoring quality.

–**Intermediary Services:** Blockchain assumes the role of the intermediary present during service provision, replacing banks in money transfers, notaries in property registration, traffic departments in vehicle registration, and brokers in buying and selling operations.

2 –Overview of Finterra Company

Finterra's concept is built on blockchain technology, aiming to disseminate community-based solutions leveraging advanced blockchain features. It seeks to develop socially, economically, and ethically secure waqf usage, applying smart contract tokenization standards to maximize returns from waqf assets, thereby achieving sustained growth for communities. Finterra*, a fintech** company, has

* Its primary headquarters is located in Geneva, and it operates as a non-profit entity, with branches in Singapore, Malaysia, Hong Kong, Abu Dhabi, and New York. The registration of Finterra began in Malaysia, which was among the first countries where the company initiated its operations. There, Finterra's product was marketed to the Malaysian Waqf Council. Subsequently, the company expanded to Singapore, home to a prominent waqf council, followed by Indonesia, India, Saudi Arabia naturally, and more recently Dubai, Bahrain, and the Sultanate of Oman.

** Financial technology, or "fintech," refers to the economic sector encompassing the majority of companies that leverage modern technology to deliver innovative services and solutions in the realm of financial services—similar to those offered by traditional financial institutions such as

developed a socially, economically, and ethically applicable platform for the comprehensive development of waqf assets through crowdfunding, while adhering to regulatory compliance. Finterra has created a crowdfunding platform to establish smart contracts for cash waqf, Islamic loans, mudarabah, and sukuk, linking them to specific waqf projects. This is achieved via a unified cloud-based financial services platform for individuals and companies, providing a more effective means for collecting donations, operating social projects, managing and transferring waqf ownership.¹ The Waqf Chain product has been marketed, and the company has received approvals from five countries' waqf boards, central banks, and capital market authorities to initiate a pilot project².

3 –The Finterra Waqf Chain Experience in Malaysia and Platform Advantages

1–3- Presentation of the Finterra Waqf Chain Experience and Its Operational Mechanism

The waqf system in many Islamic countries still requires substantial development and a tangible qualitative leap, particularly in financing and managing waqf investments. Several such countries, including Malaysia, possess numerous idle and uninvested waqf assets. Developing and effectively investing these assets demands doubled efforts and expertise utilization. To activate waqf's developmental role in Malaysia, the country has leveraged blockchain technology and crowdfunding platforms for financing and managing its waqf institutions' investments. In this context, Finterra launched a crowdfunding platform for financing and managing waqf investments in Malaysia. The platform operates solely on waqfs registered by the ministry or waqf authority in those countries, excluding family waqfs or those managed by non-governmental charitable institutions. The aim is to minimize issues arising from including waqfs with potential family or legal disputes. Its operational mechanism can be described through the following steps³:

–**Step One:** The authority or ministry of waqfs, registered solely by the ministry of waqfs in the specified country, identifies waqf land suitable for investment and upon which it wishes to establish a waqf project.

–**Step Two:** The authority prepares a developmental project including details such as waqf buildings, feasibility studies, and recommended financing tools.

banks and insurance companies. This includes electronic payment services (like digital wallets), money transfers, insurance, lending and financing (such as crowdfunding), in addition to online trading platforms and applications.

¹ Hussein Elasrag, Blockchains for Islamic Finance: Obstacles & Challenges, Munich Personal RePEc Archive, No. 92676, posted 12 March 2019, p13.

² Social solution for blockchain, Finterra the financial frontier, whitepaper, Singapore, 7th July 2018.

³ Hamza Sassi, "Benefiting from Waqf Using Blockchain Technology – Finterra Platform as a Model," Global Islamic Economy Magazine, Issue 71, General Council for Islamic Banks and Financial Institutions, Bahrain, April 2018, p 26-27.

–**Step Three:** An independent financial auditor reviews and certifies the project proposal submitted by the ministry of waqfs.

–**Step Four:** The fund management, typically a bank, is contacted to launch an ICO (Initial Coin Offering) for developing the waqf project by selling encrypted tokens to interested investors.

–**Step Five:** The Finterra platform automatically assigns a unique token to each WAQF CHAIN project in exchange for the required capital.

–**Step Six:** Interested investors purchase the token, and the collected funds are placed in a guaranteed account managed by the appointed fund management (bank). Upon purchasing the token, investors have the freedom to choose from available Islamic financial transactions.

–**Step Seven:** WAQF CHAIN offers four financial transactions: cash waqf, benevolent loan (qard hasan), mudarabah¹, and sukuk. This pertains to developing waqf-specific projects. Once funds are collected, they may be charitable, such as sadaqah, but here we must specify how funds are gathered. First, to develop the waqf, the underlying asset must be leased. Once leased and a project built upon it, it is treated like any commercial real estate unit. In Islamic finance, several tools can be used. If the project is non-profit, such as an orphanage, charitable school, or elderly home with no financial return, the only applicable tool is cash, similar to donations—it could be an interest-free Islamic benevolent loan returning only the principal, or ongoing charity (sadaqah jariyah). If the project is profit-oriented, tools like mudarabah (profit and loss sharing) can be employed, as well as sukuk or Islamic bonds. Here, it becomes based on return on investment, allowing portfolio managers to select and apply a tool to the built project.

–**Step Eight:** Once the required capital is reached, the fund management appoints a construction company to commence building and developing the project.

–**Step Nine:** Upon project completion, the fund management appoints project management to operate and maintain the waqf asset.

–**Step Ten:** The fund management collects any revenues generated by the waqf asset. Collected revenues are distributed to investors based on the used Islamic financial transactions and underlying terms and conditions.²

2–3 –Advantages of the Finterra Waqf Chain Platform

This platform is distinguished by the following characteristics:

¹ For more: Aishath Muneeza and other , The Application of Blockchain Technology in Crowdfunding: Towards Financial Inclusion via Technology, International Journal of Management and Applied Research, Vol. 5, No. 2, pp. 82-98.

² Syed Khalid Rashid, Potential of Waqf in Contemporary World, JKAU: Islamic Econ., Vol. 31 No. 2, July 2018 , pp: 57-68.

–It represents one of the most significant models of social digital innovation, striving to harness the humanitarian role of creative programming to overcome governance and technological innovation challenges in charitable work. These technologies will open broad horizons for social solutions under the management of banks and Sharia boards, propelling global investment in waqf properties to enhance their economic, societal, and humanitarian developmental roles.

–It is the first innovative platform in crowdfunding and waqf development, addressing the gap between the global value of waqf assets—estimated at a trillion dollars—and total income, along with the anticipated added value. Blockchain technology can be leveraged in the waqf sector across various areas, such as information management, privacy, decentralization, and executing smart contracts.

–The platform's compliance with Islamic Sharia rulings¹.

–All documents preserved through blockchain are authenticated and dated by the contracting parties.

–The technology features distinct steps to maintain the security of concluded transactions. Moreover, the innovative waqf environment includes numerous stakeholders forming an institutional framework through this new technology, which serves as a form of guarantee.

–Cataloguing diverse waqfs via this technology relies on how those waqf assets are formulated in the blockchain platform, playing a fundamental role in securing process audits. This allows smart contracts to define variables based on the primary waqf stakeholders.

–There are no major potential risks associated with this technology, as dealings are permitted only with authorized members for these transactions.

–To date, no institutions in the Arab world engage with this technology.

–This technology can have a single owner or a group of owners.

–One drawback of waqf institutions ignoring this technology is their inability to convince financiers to contribute to waqf development.

–Information on registered waqf assets via blockchain cannot be updated except by stakeholders.

–Employing blockchain technology activates and develops waqf management, enabling the utilization of a vast array of underutilized assets across the Islamic world.

–As a general user, you must visit the Finterra website and register yourself, as verifying applicants' eligibility before classifying them as investors is one of the

¹ Ahcene lahsasena, waqf and blockchain : sharia compliance requirements, intenational waqf and blockchain forum, bank rakyat convention centre, Malaysia, 1 march 2018,p11-14.

capital market authority's requirements for crowdfunding. No funding can be accepted from the public without this. Upon registration, you provide all your details, and the company verifies according to KYC ("Know Your Customer") standards, in line with anti-money laundering laws. The company examines your employment and income level—for example, you cannot have an income of a thousand and invest a million—reviews your income source, and assigns you a credit rating. After completion, you gain access to all waqf projects, each with its own file. Some projects carrying a return on investment display that return, allowing you to decide accordingly. Other projects may be charitable, benefiting society but offering no material return, in which you can contribute.

- The blockchain platform can aid in developing and rebuilding new projects using Sharia-compliant smart contracts. Blockchain solutions for waqf can grant users financial freedom by making transactions more efficient and transparent. Additionally, users can engage in a range of activities through their ecosystems.

- The blockchain solution for waqf is truly the first of its kind, generating specific capital or crowdfunding used for societal benefit through charitable projects.

- The blockchain system offers something exceptionally distinctive, perfectly suiting Islamic finance and waqf unlike previous programs. It features registries and encrypted technology ensuring security, as well as transaction publicity, allowing the public to conduct deals securely while maintaining transparency—all transactions are available for public audit but secure, accessible only via a private key held by a specific person. Thus, for the first time, we see this technology benefiting waqf institutions and Islamic finance¹.

- Using blockchain can restore trust in waqf, contributing to providing complete data and documents on waqf. This helps establish a globally shared database that can be easily reviewed and verified for compliance, thereby enhancing transparency.

- Finterra aims to launch futures contracts for waqf projects, similar to trading oil, wheat, or gold contracts. Investors do not visit oil fields to check extracted quantities but trade oil on the platform. Why not create a platform for trading waqf assets, placing trillions of dollars in waqf land assets on a blockchain-controlled base platform, with trading via futures contracts?

4- Conclusion

Through this study, we have endeavoured to familiarize ourselves with blockchain technology, including its elements, principles, and key applications. Additionally, the study has sought to illuminate the role of Finterra as one of the foremost fintech companies, which aims to propagate community-oriented solutions grounded in the advanced features of blockchain technology. This involves fostering secure waqf

¹ Siti Zulaikha and Sylva Arif Rusmita, Blockchain for Waqf Management, The International Conference of Organizational Innovation, 2018, p1152-1158.

utilization on social, economic, and ethical fronts, while applying smart contract tokenization standards to maximize returns from waqf assets, thereby ensuring sustained growth for communities. In this vein, we have reviewed Malaysia's experience in financing and managing waqf assets and investments by leveraging blockchain technology via the Finterra Waqf Chain platform.

- Results

The study has arrived at the following findings:

1. Blockchain serves as a decentralized, open-source database—one of the pivotal outcomes and achievements of digital currencies—enabling two or more parties to engage in financial or commercial transactions without requiring a third party to build trust.
2. Blockchain's applications span diverse fields, extending beyond mere money transfers, whether digital or conventional. This technology can facilitate property registration, intermediary services, and transaction documentation.
3. Finterra's foundational idea revolves around blockchain technology, with the goal of disseminating community-based solutions that capitalize on blockchain's advanced attributes. It promotes secure waqf usage in social, economic, and ethical dimensions, alongside implementing smart contract tokenization standards to optimize returns from waqf assets, fostering ongoing community growth.
4. Malaysia stands as the first Islamic country to employ blockchain technology in serving and advancing the waqf sector.
5. The Finterra Waqf Chain platform in Malaysia, launched by Finterra, creates smart contracts for cash waqf, Islamic loans, mudarabah, and sukuk, linking them to designated waqf projects. This occurs through a unified cloud-based financial services platform for individuals and corporations, offering a more efficient means for gathering donations, operating social projects, managing and transferring waqf ownership, and financing waqf investments.
6. It can aid in amassing the necessary funds for developing such endowments, with the decentralized nature of this technology emerging as a vital factor in revitalizing waqf and converting it into a source of returns that can be utilized to enhance ancient endowments.

-Recommendations

The following recommendations can be proposed:

1. It is essential for waqf institutions in the Islamic world to embrace blockchain technology and adopt it to refine their services and enhance performance.
2. There is a need to draw upon the experiences of fintech startups in the United States, identifying their success factors, while waqf institutions forge agreements with these companies concerning the training of competent and experienced personnel in the field.
3. Establishing protective systems, particularly those related to safeguarding against any form of cyberattacks, which necessitates regulatory frameworks for information security and data exchange.

5- References

1. "Social Solution for Blockchain, Finterra the Financial Frontier," Whitepaper, Singapore, July 7, 2018.
2. Ahcene Lahsasena, "Waqf and Blockchain: Sharia Compliance Requirements," International Waqf and Blockchain Forum, Bank Rakyat Convention Centre, Malaysia, March 1, 2018.
3. Aishath Muneeza et al., "The Application of Blockchain Technology in Crowdfunding: Towards Financial Inclusion via Technology," International Journal of Management and Applied Research, Vol. 5, No. 2.
4. Andreas Adriano and Hunter Monroe, "The Internet and Trust," Finance & Development Magazine, International Monetary Fund, United States, June 2016. Joshua Baron et al., Implications of Virtual Currency for National Security, RAND Corporation Publications, California, United States, 2015.
5. Hamza Sassi, "Benefiting from Waqf Using Blockchain Technology – Finterra Platform as a Model," Global Islamic Economy Magazine, Issue 71, General Council for Islamic Banks and Financial Institutions, Bahrain, April 2018.
6. Hussam Ezz El-Din, "How Can We Harvest Donations Through the Virtual World on the Internet?", Paper presented at the "Third Gulf Charitable Work Conference," Department of Islamic Affairs and Charitable Activities, Dubai, United Arab Emirates, January 20-22, 2008.
7. Hussein Elasrag, "Blockchains for Islamic Finance: Obstacles & Challenges," Munich Personal RePEc Archive, No. 92676, posted March 12, 2019.
8. Ihab Khalifa, Blockchain: The Upcoming Technological Revolution in Finance and Management, Academic Papers, Issue 3, Future Center for Advanced Research and Studies, Abu Dhabi, UAE, March 2018.
9. Jo Barraket, "Online Opportunities for Civic Engagement? An Examination of Australian Third Sector Organisations on the Internet," Australian Journal of Emerging Technologies and Society, Vol. 3, No. 1, 2005.
10. Rizal Mohd Nor et al., "Blockchain Sadaqa Mechanism for Disaster Aid Crowdfunding," in Zulikha (ed.), Proceedings of the 6th International Conference on Computing and Informatics, ICOCI 2017, April 25-27, 2017, Kuala Lumpur, University Utara Malaysia.
11. Samer Qantqji, "Bitcoin and Its Siblings Compete with the Global Monetary System, and Blockchain May Reshape the World Economy," Global Islamic Economy Magazine, Issue 67, General Council for Islamic Banks and Financial Institutions, Bahrain, December 2017.
12. Siti Zulaikha and Sylva Arif Rusmita, "Blockchain for Waqf Management," The International Conference of Organizational Innovation, 2018.
13. Syed Khalid Rashid, "Potential of Waqf in Contemporary World," JKAU: Islamic Econ., Vol. 31, No. 2, July 2018.
14. Tariq Abdullah, "Globalizing Ongoing Charity: Toward a Global Agenda for the Waqf Sector," Awqaf Journal, Year 8, Issue 14, General Secretariat of Awqaf, Kuwait, May 2008.