

Exploring Blockchain for Small Estate Management in Malaysia

Ummu Sulaim Azmin¹, Khairil Faizal Khairi², Nur Hidayah Laili³

¹Master Student, Faculty of Economics and Muamalat, Universiti Sains Islam, Malaysia,

²Associate Professor, Faculty of Economics and Muamalat, Universiti Sains Islam Malaysia,

³Senior Lecturer, Faculty of Economics and Muamalat, Universiti Sains Islam Malaysia

Email: khairil@usim.edu.my, hidayah@usim.edu.my

Corresponding Author Email: sulaimazmin@gmail.com

DOI Link: <http://dx.doi.org/10.6007/IJARBSS/v15-i12/27245>

Published Date: 28 December 2025

Abstract

The administration of small estates in Malaysia is currently hampered by significant inefficiencies, prolonged delays, and family disputes stemming from complex bureaucratic procedures, fragmented records, and a lack of technological integration. This systemic failure contributes to a growing number of frozen assets, which carry serious socio-economic implications and contradict Islamic principles of timely distribution. This study utilizes a phenomenological qualitative approach, conducting semi-structured interviews with four key informants, including officials from the Small Estate Distribution Section (JKPTG) and legal practitioners, to explore the potential of blockchain technology as a transformative solution. Thematic analysis identified four themes: (1) Inefficiencies in the current systems, (2) Documentation and ownership issues, (3) Jurisdictional & Legal Fragmentation and (4) Potential of Blockchain Technology. Findings confirm high acceptance of blockchain among practitioners, noting its potential to create a single, immutable digital vault for asset and heir data, utilize smart contracts for automated distribution, and reduce disputes through enhanced transparency. The study offers a conceptual framework and policy implications vital for successful digital transformation and administrative reform in Malaysia's inheritance management system.

Keywords: Small Estates, Blockchain Technology, Inheritance Management

Introduction

The management of small estates remains a persistent and critical issue within Malaysia's socio-legal landscape. Each year, the value and volume of frozen estates continue to increase, significantly delaying the distribution of assets to rightful heirs. This situation not only undermines beneficiaries' legal and moral rights but also generates broader socio-economic consequences, including prolonged asset immobilization, loss of economic productivity, and perceptions of injustice among heirs. From an Islamic perspective, such delays are particularly problematic, as Islamic inheritance principles emphasize timeliness, transparency, and

fairness in estate distribution to safeguard the welfare and rights of beneficiaries. Despite the centrality of these principles, the administration of small estates in Malaysia remains burdened by systemic inefficiencies.

Currently, small estate administration involves multiple institutions, including the Department of the Director General of Lands and Mines (JKPTG), the High Court, the Syariah Court, Amanah Raya Berhad, and several supporting agencies. While this multi-agency framework is intended to ensure legal and procedural rigor, in practice it has resulted in fragmented responsibilities, duplication of processes, jurisdictional overlaps, and inconsistent verification procedures. Challenges such as delays in heirs' verification, incomplete legal documentation, duplication of beneficiary claims, and reliance on inefficient information systems have collectively prolonged case resolution, leaving many estates unresolved for extended periods. These weaknesses are further exacerbated by continued dependence on manual documentation and physical submissions, which increase the risks of record loss, system instability, and administrative backlogs.

The seriousness of this problem is reflected in the sharp increase in unclaimed and frozen estates in Malaysia, which reportedly rose from RM40 billion in 2007 to RM66 billion in 2016. This trend signals not merely an administrative shortcoming but a systemic crisis with far-reaching implications. Economically, frozen estates hinder asset circulation, reduce development potential, and contribute to revenue losses. Socially, prolonged disputes and unresolved claims fuel family conflicts and perpetuate intergenerational inequities. These outcomes stand in direct contradiction to Islamic principles that demand swift, and transparent, inheritance distribution as a means of preserving social harmony and justice. Despite the advancement into the era of the Fourth Industrial Revolution (4IR), inheritance administration remains trapped within a fragmented and paper-based governance structure. Thus, the emergence of digital technologies presents a compelling opportunity for efficient inheritance management. Blockchain technology, characterized by its decentralized architecture, immutability, transparency, and cryptographic security, offers a transformative alternative to conventional administrative systems. By enabling secure, tamper-resistant, and synchronized record-keeping across institutions, blockchain has the potential to automate verification processes, prevent fraudulent claims, streamline inter-agency coordination, and enhance trust among stakeholders. Importantly, these technological in line with Shariah principles, particularly in ensuring accuracy, accountability, and fairness in inheritance distribution. Nevertheless, despite its growing application in various sectors, the use of blockchain in small estate management in Malaysia remains nascent, with limited empirical evidence examining its practical suitability within existing legal and Shariah frameworks.

Motivated by the urgent need to address the persistent backlog of frozen estates and the absence of empirically grounded digital solutions in inheritance administration, this study seeks to explore the potential of blockchain technology as a viable reform mechanism. Specifically, the study is driven by two interrelated motivations: first, to understand the structural, administrative, and technological challenges that continue to impede efficient small estate management; and second, to examine stakeholders' acceptance of blockchain technology as a means of overcoming these challenges. By adopting a phenomenological qualitative approach, this study captures the lived experiences, professional judgments, and

institutional realities of key stakeholders, including officers from the Small Estate Distribution Section and legal practitioners directly involved in inheritance administration.

This study makes several important contributions to knowledge and practice. Empirically, it provides one of the earliest qualitative investigations into blockchain adoption in small estate management within Malaysia's dual legal and Shariah-based system, thereby addressing a significant gap in the existing literature. Conceptually, the study advances understanding by systematically mapping identified administrative constraints, such as jurisdictional fragmentation, inter-agency integration failures, and verification complexities, onto the functional capabilities of blockchain technology. This mapping contributes to the development of a context-specific, Shariah-aligned conceptual foundation for digital inheritance management. From a practical and policy perspective, the study offers a strategic roadmap for administrative reform by proposing the transition from fragmented manual processes to a system that use blockchain technology for asset and beneficiary data. Through the potential integration of smart contracts governed by faraid principles, the study outlines a pathway toward reducing bureaucratic delays, preventing disputes, and enhancing public trust in inheritance administration. Collectively, these contributions position the study as a meaningful step toward the development of a transparent, efficient, and Shariah-compliant small estate management system capable of operating across Malaysia's complex institutional landscape.

Literature Review

In Malaysia, inheritance management consist of three different types of properties, large estate, small estate, and simple estate. A small estate refers to the deceased's property that is not more than RM5 million and contains immovable property or combining movable and immovable property. According to the Small Estate Distribution Act 1955 (Act 98), the administration of small estates is carried out by the Small Estate Distribution Section under the Department of the Director General of Lands and Mines (JKPTG). Although this system was created to facilitate the affairs of beneficiaries, various challenges still arise including bureaucracy, lack of information, duplication of claims between beneficiaries, as well as delays in the settlement of applications. Shafie et al. (2017) emphasized the importance of estate planning throughout life, for example through an inter vivos gift or gift mortis causa, as a preventive measure against complications and delays in distribution.

Estate administration in Malaysia involves a variety of procedures and agencies, including the requirement for certified documents, witnesses, as well as court orders. Although this system was created to ensure legitimate and fair management, it is often time-consuming and burdensome for the beneficiaries (Hasbullah et al., 2021; Shafie et al., 2017). In fact, the administration of estates under the faraid system is also considered complicated and often results in unclaimed assets due to lack of knowledge and administrative weaknesses (Hasbullah et al., 2021; Shafie et al., 2017). One of the major issues in estate administration in Malaysia is the frequent family disputes among the heirs. The study of Nasrul et al. (2019) introduced mediation as a potential dispute resolution mechanism, as it can address emotional distress as well as speed up the estate administration process. This method is seen as more practical than a court trial alone, especially when it involves emotions and fragile family relationships.

The issue of unclaimed inheritance is also a serious concern. The value of unclaimed property in Malaysia increased from RM40 billion in 2007 to RM66 billion in 2016 (Yazid Ahmad et al., 2018). This growing amount not only freezes assets in the long run but also affects the country's economy through property tax arrears and loss of economic development potential. Several factors have been identified contributing to this problem, including legal constraints, negative sociocultural practices, as well as lack of public awareness and education on the importance of estate management (Bakar et al., 2020; Yazid Ahmad et al., 2018). From a legal point of view, complex procedures and lengthy bureaucracy are barriers to more efficient estate administration (Bakar et al., 2020; Yazid Ahmad et al., 2018). In addition, the education aspect also plays an important role. Studies show that increased education and awareness about the laws and processes of estate administration can reduce the problem of frozen assets (Bakar et al., 2020). Therefore, legal education program and public awareness campaigns are recommended to educate the public on the importance of planning and managing their estate more systematically (Bakar et al., 2020).

Furthermore, sociocultural practices are also seen as a contributing factor to the increase in unclaimed property. Some families tend to postpone inheritance matters because of the perception that managing the estate after death is considered disrespectful to the deceased. This directly slows down the asset distribution process and causes resilient assets (Yazid Ahmad et al., 2018). To mitigate this issue, improvements need to be made including streamlining legal procedures and creating a more accessible administrative system (Yazid Ahmad et al., 2018). Then, unsystematic documentation issues such as the absence of legal ownership documents, duplication of titles, and incomplete beneficiary information also affect the smooth administration. This lack of records complicates the property verification process and opens space for disputes and fraud. Therefore, small estate management demands a system that is more transparent, reliable, and easily accessible to all stakeholders. Along with the development of the Industrial Revolution 4.0, blockchain technology is starting to be seen as an innovative solution to overcome the challenges of small estate management. Blockchain serves as a decentralized, transparent, immutable, and auditable digital ledger. In the context of inheritance, this technology has the potential to record asset information, beneficiary data, governing power of attorney documents, as well as transaction records automatically and transparently. In fact, several countries have begun to explore the use of blockchain in public administration, including land and estate management. However, the literature shows that the use of blockchain in the context of small estates in Malaysia is still in its early stages. This is due to the absence of a supportive policy, lack of understanding of the authorities and end-users, and legal constraints and alignment with Shariah principles. Despite the growing theoretical discourse, empirical research that directly examines the potential of blockchain integration in estate management is still limited. Therefore, this study plays a role in bridging the gap through in-depth exploration based on stakeholder narratives, thus contributing to the development of policies and estate management systems that are more efficient, transparent, and in line with Shariah demands.

Research Methodology

This study uses a qualitative approach with phenomenological research design to deeply understand stakeholders' experiences and perceptions of small estate management as well as the potential use of blockchain technology in the process of managing small estates. The phenomenological design was chosen because it allows researchers to examine participants'

real experiences holistically which in line with the objectives of the study. To obtain rich and relevant data, a semi-structured interview method is used. This method was chosen because it allows researchers to explore participants' perspectives openly yet remain directional with flexible question guidance. Semi-structured interviews are also suitable for revealing implicit issues related to the challenges of small estate administration and acceptance of blockchain technology.

Four participants were selected through purposive sampling because of their position and relevant experience in the field of estate management. The participants are a Director and a Deputy Director of the Small Estate Distribution Section, a manager of a trustee firm, and an estate lawyer. This selection allows for insights to be gathered from a wide range of stakeholders directly involved in the administration of small estates. The data collection process was conducted through interview sessions that lasted between 45 to 60 minutes for each participant. All interview sessions were recorded with the consent of the participants, then fully transcribed for analysis. The data obtained were analyzed using thematic analysis methods to identify key themes that reflect the challenges, understanding, and acceptance of the use of blockchain technology in small estate management. This study uses **Atlas.ti** software to organize code, themes, and subthemes systematically.

Lastly, to ensure the validity and reliability of the study, several measures have been taken. Credibility is enhanced through verification from field experts, while resource triangulation is done by comparing data between participants. In addition, all study procedures are conducted according to research ethics guidelines. Ethical approval has been obtained in advance, and all participants provide informed consent before the interview session is conducted.

Findings & Discussions

This section of the study presents the qualitative data gathered through semi-structured interviews with key stakeholders involved in small estate administration in Malaysia. This study found key challenges in managing small estates, which are inefficiencies in the current system, documentation and ownership issues, and jurisdictional and legal fragmentation. The thematic analysis organized these findings into four key themes, which include these systemic issues as well as the perceived potential of blockchain for secure and transparent record-keeping. This study also discusses the potential of blockchain technology to deal with the current issues. Overall, the findings reveal that while small estates management is complicated by systemic, cultural, and legal aspects, the acceptance of blockchain technology is high among industry practitioners, who view it as a support tool capable of improving efficiency, transparency, and fairness in the small estates distribution process.

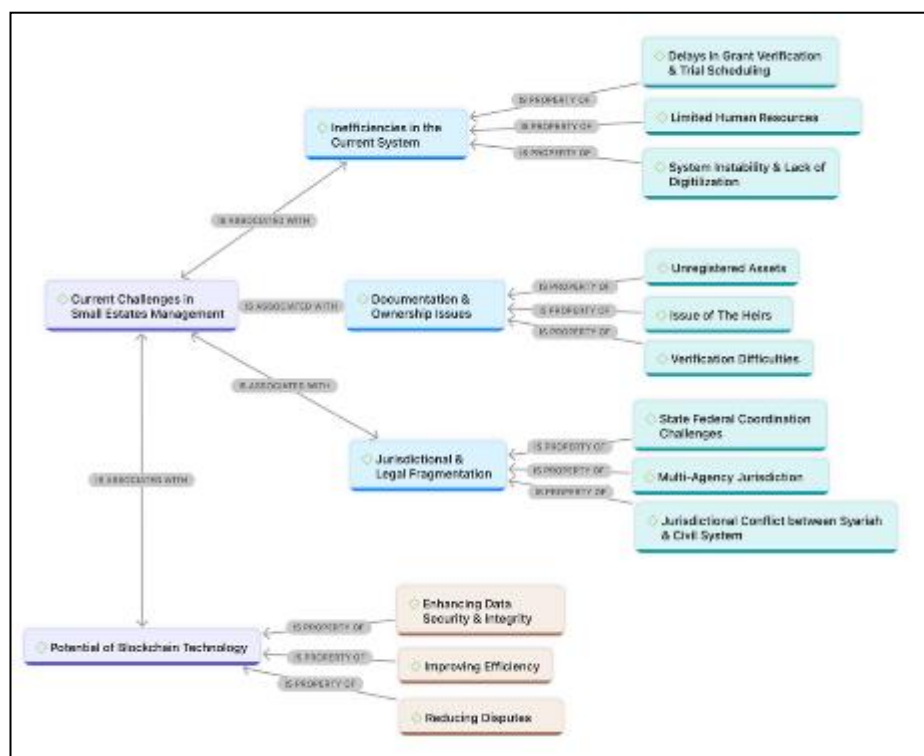


Figure 4.1: Current Challenges in Small Estates Management & Potential of Blockchain Technology

Inefficiencies in the Current System

The first theme highlights the key challenges in the existing system that affect the effectiveness of small estate management. Three subthemes were identified: delays in grant verification and trial scheduling, limited human resources, and system instability, and lack of digitization.

Delays in Grant Verification and Trial Scheduling

This study found that delays in the grant verification process and scheduling of hearings are major problems in small estate management. Participants P1 and P4 emphasized that delays in grant verification and trial scheduling often occur, resulting in beneficiaries waiting years for a decision.

"Even though the law is clear, the procedure is long... sometimes heirs must wait years to get a decision." - P1

"After the MCO, need to wait almost a year... before that, sometimes 3 months, but now even 2 years for a written order." – P4

These findings confirm by Maimanah et al. (2024) who stated that delays in the distribution of inheritances are common due to legal structures and cultural norms. Syariah court, judges, advocates, and clerics do not have the power to enforce the distribution of the estate immediately, thus causing delays in the process. In addition, community-rooted customary inheritance laws consider immediate distribution to be unethical or uncivilized, making the issue of this delay more complex.

Limited Human Resources

The lack of specialized officers and the high number of cases caused delays in the process, and there were even cases that waited for months just to get the signature of the superior officer. This situation shows the urgent need for a more effective distribution of human resources.

"Before this only 2 officers in Seremban and I had to cover 4,000 cases a year and we could not have trial every day." – P2

"The employee was too busy, even orders just need to be signed, but the manager didn't do so for months." – P4

Human resource constraints also affect the administrative process, especially when limited officers need to manage thousands of cases. The problem of lack of human resources and the dumping of cases is also a big challenge. This supports the view of Almurad et al. (2020) that the use of human resource analytics (HR) and advanced information systems can help better manage resources, reduce delays and improve operational efficiency.

System Instability & Lack of Digitization

More critically, the study's findings show that weak documentation, loss of physical documents, and repetitive processes cause case resolution to drag on for over 10 years in complicated situations. This proves the need for comprehensive digitalisation supported by technical policies and training to ensure long-term effectiveness.

"The main challenge is... now that we have an integration between the High Court and JPPH... sometimes cannot be transmitted or updated in the system." – P1

"Form A is online... but the supporting documents must be sent by hard-copy physically at the counter." – P2

"System is too old, so it is heavy... We give advice to only upload the grant." – P2

"Documents we submit by hand... they said not received... but luckily we had an accompanying letter." – P4

"Court already has e-filing... inheritance should also be like court... upgraded system to automate." – P4

"If in the system... anyone can access... actually helps a lot." – P4

"The citizen needs to hire someone else who is good at doing it... because they don't know how to scan and upload." – P4

Technical problems and the complete absence of digitization add to the burden on the heirs in managing documents. The instability of the system and the absence of digitalization contribute to operational delays. The study found that interagency integration systems often fail to work, documents still need to be submitted physically, and digital records are often incomplete. This issue is in line with the findings of Naji et al. (2025) who assert that the instability of the Internet system negatively impacts organizational workflows. Digitalization has the potential to improve operational efficiency through process improvements, reduced labor costs, and resource optimization (Bondar et al., 2024). However, Oliver (2016) points out that investment in digital skills as well as training is essential to maximise those benefits.

Furthermore, Chen et al. (2024) state that strategic planning combined with digitalization can provide a competitive advantage, while Privara et al. (2025) suggest policy support to promote digital literacy and infrastructure integration.

Documentation and Ownership Issues

Documentation and ownership issues also are identified as challenges in small estate management. Three subthemes emerged: unregistered assets, issue of the heirs, and verification difficulties.

Unregistered Assets

Unregistered or unidentified assets make it difficult for the heirs in the claims process. The findings of the study show that the absence of a centralised asset register makes it difficult for heirs and officials to identify assets.

"A big problem is assets not being registered in one place. Some land is in the father's name, but heirs don't know where it is." – P4

"They do not have the initiative to check the assets... if we're left behind, it's our responsibility." – P4

English et al. (2022) point out that a structured asset register is essential for effective management, yet this process is often prone to errors and technical challenges. As a solution, Dylus (2019) suggests transferring asset registration to a blockchain system as it is able to improve security, recognize assets more transparently, as well as reduce the risk of syntax errors and incomplete asset history.

Issue of the Heirs

Overlapping names of beneficiaries, concealment of identities, as well as conflicts between family members add to the complexity of administration. The problem of struggle and conflict between heirs is the main theme in this study.

"They don't know what to write... when there are many names, it becomes difficult to understand." – P1

"Heirs who were present... hid the identity of others... when the entitled party knew, they had to appeal, but 30 days only." – P4

"They argue because of the distribution is unfair... land near the road vs. rice field... disputes with each other." – P4

"Usually, two teams... first wife's children, second wife's widow... if no agreement, it goes to court." – P4

"We have young professionals who don't even know their Islamic inheritance rights or obligations." – P3

"The culture discourages open conversations about inheritance... people think preparing a will means expecting death." – P3

"We have seen cases where beneficiaries went to both AmanahRaya and the Land Office unknowingly." – P3

"People say disrespectful... process the inheritance while grave is still red... but Prophet PBUH asked us to expedite it." – P4

These findings are consistent with Maimanah et al. (2024) who stated that process delays can lead to family conflicts, abandoned property, and prolonged litigation. These disputes often stem from perceived unfairness in the distribution of property, particularly in polygamous families. Conflicts between two groups of heirs, strategic property disputes, as well as the actions of heirs to hide the identity of the other party show the seriousness of this problem. According to Nasrul et al. (2019), inheritance disputes can be addressed through litigation, mediation, or family meetings, with mediation proving effective in fostering unity. However, the findings of this study also reveal that socio-cultural barriers prevent heirs from making advance planning, such as grants or wills, as they are considered taboo. Such perceptions add complexity when faraid is not comprehensively understood, thus increasing internal conflicts.

Verification Difficulties

The difficulty of verifying information, documents and the life-or-death status of the heirs affects the smooth running of the process. The process of verifying information was found to be slow and often delayed due to document constraints, reluctance of beneficiaries to sign, as well as difficulties in confirming the death of individuals who had not yet been reported.

"We have to make sure that every information filled in must be accurate with the documents submitted." – P1

"One heir may refuse to sign documents, and the others don't know what to do next. It just stays unresolved." – P3

"We don't know that this person is dead... suddenly someone sends a grant... you have to file again." – P4

"Applications for birth cert, marriage cert, death cert... if blockchain integrated, no repeated processes." – P4

This is in line with the findings of Hassan et al. (2020) that public sector data integration faces policy constraints, management support, and human resources. Techniques such as model review and theorem proof can ensure the accuracy of digital systems (Hulin & Hu, 2012), but they remain limited. The challenge is to maintain complete and intact data integrity, as trust in digital systems only exists when new information can be verified with existing data (Knowles, 2016; Sultanum et al., 2024). Furthermore, in multi-stakeholder projects, there is a tendency to opt for low-cost authentication methods even if they are less effective (Kulkarni et al., 2022). Bayesian inference methods such as those proposed by Farkhondehmaal & Salado (2020) have the potential to improve efficiency through more adaptive holistic models.

Jurisdictional and Legal Fragmentation

Jurisdictional and Legal Fragmentation also identified as challenges in small estates management. Three subthemes were identified: state-federal coordination challenges, multi-agency jurisdiction, and jurisdictional conflict between Syariah and Civil systems.

State-Federal Coordination Challenges

This study found that the issue of overlapping powers between state and federal agencies caused confusion in the management of inheritance. This situation coincides with the view of Mahamood & Ab Majid (2014) that the absence of legal coordination between the Civil Courts, Syariah Courts, and land administration has created a prolonged conflict of jurisdiction. For example, estate management officers often face difficulties in verifying the jurisdiction of a case, especially when it involves movable and immovable property in

different states. In addition, administrative bureaucracy has been found to further slowdown the resolution of cases. Officers and beneficiaries must commute between agencies due to the lack of an effective integration system.

"The land office... land is a state matter, so we're going to have to convince the states to accept the e-land system." – P1

"... matters related to probate and administration are under the federal government. But we must amend it and look back at the constitution." – P1

"JPPH wants the real requirements in the grants, but some JPPHs are not aligned." – P1

This finding is supported by Hashim & Yusoff (2021) who point out that the complex bureaucratic structure in inheritance management in Malaysia has contributed to the increase in the number of unclaimed properties. A stage-by-stage process without technical coordination only adds time and cost burden to the beneficiaries.

Multi-Agency Jurisdiction

This study also highlights the absence of a centralized body that regulates all aspects of estate management. The existence of various entities, Small Inheritance Distribution Section, High Courts, and Land Offices leads to duplication of power and confusion.

"So, the people need to submit applications in the right places, the challenge of getting the right information. Sometimes the citizen is confused." – P2

"Why do we still need 3 agencies in 2023? We should have made a department for a long time so that people can manage it more easily." – P2

"If the trustee is not stated, we will refer it to the high court, this is one of the issues that we cannot resolve." – P2

"NRD cannot have integration due to privacy, because there was an issue selling data." – P2

"JPPH has their own system... can't integrate... only included in MyeTaPP." – P2

"Ownership documents of the properties are all owned by the state land office." – P2

"The biggest issue is land data—held by the state, not centralized. Each Land Office has its own format." – P3

"To get an LA from court just to access a bank account, it takes months... meanwhile, the estate just sits." – P3

"Small estate distribution section JKPTG is not freezing people's assets, that's a wrong perspective." – P1

"Now the community doesn't know where to go... we have AmanahRaya, estate office, High Court." – P1

In the context of governance theory, Halim et al. (2019) assert that centralized systems can increase transparency, speed up processes, as well as reduce jurisdictional conflicts. The heirs are often confused about where they should apply to, whether it's the Small Estate

Distribution Section, the High Court, or the Syariah Court. Therefore, the findings of this study point to the urgent need for policy coordination between the state and federal governments.

Jurisdictional Conflict between Syariah and Civil Systems

Studies have found that the overlap between shariah and civil law often delays the estate settlement process. For example, distribution according to faraid cannot be carried out without the approval of the Civil Court, while the Syariah Court does not have full jurisdiction over immovable property. This situation is in line with the findings of Yaakob (2018) who stated that this legal conflict not only delays the process but also creates confusion for the public.

"The issue is jurisdiction. The Syariah Court has decided the case of inheritance distribution, but the jurisdiction is under the federal government." – P2

"If there is a will, hibah, or faraid dispute, must go to Syariah Court first before we can proceed." – P2

"We do not have a centralized body to manage inheritance matters for Muslims, like what exists in the UK for non-Muslims." – P3

"Many times, when there is a hibah, the Land Office won't recognize it, or it will still be frozen, waiting for further instructions." – P3

"If there are issues that arise involving inheritance, needs to be verified first at the Syariah High Court, then only proceed with estate administration." – P4

This legal conflict not only delays the process but also undermines social justice. Heirs who do not have legal knowledge have to bear high legal costs and go through a lengthy trial process. These findings support the view of Aziz et al. (2021) that delays in estate management carry serious socio-economic implications including increased property freezes, family disputes, and loss of economic potential.

In addition, the difference in legal interpretation between civil and shariah judges adds to the challenges. These findings are consistent with Ishak & Ramli (2020) who pointed out that differences in approach between the two legal systems often affect the effectiveness of estate management, especially when cases involve polygamous families or complex estates. These findings coincide with the findings of Hamid et al. (2020) who stated that clashes of power between civil and sharia courts in small estate cases often affect the smooth running of the process.

Moreover, conflicts between agencies also arise when the directives or decisions issued contradict each other. This results in the beneficiaries having to go through the appeal process or reopen the case at a different agency, thus extending the settlement period. This is in line with the findings of Ali & Haris (2021) that the lack of coordination between administrative agencies has been a contributing factor to the increase in the amount of frozen property.

Furthermore, the absence of a legal framework that consolidates jurisdiction between federal and state agencies makes the process even more complex. According to Mohd Shah (2022),

Malaysia's system of legal dualism which a combination of civil, syariah, and customary law, creates practical challenges in the management of small estates.

Potential of Blockchain Technology

Based on the discussion, blockchain technology have a potential that could improve transparency, data security, as well as interagency integration. Three subthemes emerged: transparency & immutability, enhancing data security and integrity, and positive perception of blockchain integration.

Enhancing Data Security and Integrity

Studies show blockchain has great potential in improving the transparency of inheritance management. With its immutable nature, all transactions and documents can be publicly tracked by all stakeholders.

"We need a single digital vault for wills, that can be accessed only by authorized parties." – P3

"Almost 16 years... case not resolved... blockchain record could have preserved asset and heir data safely." – P4

These findings coincide with Crosby et al. (2016) who assert that blockchain allows for transparent audits without the need for intermediaries.

Improving Efficiency

In addition, blockchain also seeks to speed up the process. The smart contract system allows the distribution of property to be carried out automatically based on the faraid conditions that have been set.

"I agree with this blockchain, it doesn't interfere with the existing system, no problem." – P1

"I agree with your study if we can create blockchain technology between several agencies involved to make matters easier." – P2

This in line with Swan (2015) who stated that smart contracts can reduce time, cost, and bureaucracy in asset management.

Reducing Disputes

Furthermore, the use of blockchain has the potential to reduce beneficiary disputes because all asset data, documents, and verification decisions are permanently recorded and accessible to authorized parties.

"If you can show that a will or hibah was recorded in blockchain, no one can argue the authenticity." – P3

This finding also supports by Tapscott & Tapscott (2017), blockchain functions can reduce conflicts as well as increase social trust.

Conclusion

This study provides valuable empirical insights into how blockchain can address ongoing issues in inheritance management in Malaysia. Four main themes have been identified which

are inefficiencies in the current system, documentation and ownership issues, jurisdictional and legal fragmentation and the potential of blockchain technology. These findings show that while inheritance management is still shackled by various challenges from systemic, cultural, and legal aspects, acceptance of blockchain technology is high among industry practitioners. They see this technology as a support tool that can improve efficiency, transparency, and fairness in the inheritance distribution process. Blockchain offers technological innovations such as secure record keeping, smart contract automation, and transparency. The successful implementation of this technology depends on the level of institutional readiness, the legal framework, as well as the support of government policies. Therefore, policymakers must consider phased integration, public education, and legal coordination to enable successful adoption.

From a theoretical point of view, this study expands on the existing literature on inheritance management by integrating blockchain technology perspectives into the discourse of inheritance management. These findings show how blockchain technology can be applied in the context of inheritance management, thus enriching the theoretical framework in that field. From a practical point of view, the findings show that blockchain has the potential to speed up the document verification process, reduce cases of property disputes, and improve the accessibility of information to beneficiaries, thereby reducing administrative burden and improving the effectiveness of existing systems. From a policy perspective, this study emphasises the need to create a legal framework that supports the application of blockchain in estate management. Support from the government through policies implication, technical guidelines, and Shariah frameworks is critical to ensure the sustainability of the implementation of this system. Overall, the implementation of blockchain in the context of estate management demands not only digital transformation, but also administrative reform and increased understanding of society. With institutional readiness, multi-stakeholder collaboration, and strong policy support, blockchain systems have the potential to be an innovative and integrative model that can strengthen social justice, accelerate inheritance distribution, and improve the well-being of heirs in Malaysia. Thus, this study provides a solid foundation for developing a blockchain-based estate management system that is transparent, user-friendly, Shariah-compliant, and capable of functioning across existing government agencies.

References

- Abdul Rahman, N. (2008). Conversion of minor to Islam in Malaysia: Whither consent of parents? *Sharia Journal*, 16, 585–602. umrefjournal.um.edu.my/filebank/published_article/2602/944.pdf
- Al Obaidy, A. L. A., Alshehadeh, A. R., Al-Khawaja, H. A., Basheti, I. A., & Al-Zaqeba, M. A. A. (2024). Development of a new concept and definition of inheritance risk management in family businesses toward sustainability. *International Journal of Advanced and Applied Sciences*, 11(6), 1–13. <https://doi.org/10.21833/ijaas.2024.06.001>
- Almurad, N. Y., Alddabbag, A. H., & Mahmood, O. A. (2020). The effectiveness of a technical approach to human resource management (field study in general electricity company mosul). *International Journal of Innovation, Creativity and Change*, 11(9), 37–58.
- Ba, N. S., Usman, A., Gasasira, A., Kabore, P., Achu, B., Kulausa, H., Chanda, E., Olu, O. O., Cabore, J., & Moeti, M. (2025). Transforming technical assistance for more effective health services delivery in Africa: the WHO multi-country assignment teams experience. *Frontiers in Public Health*, 13(June), 1–7. <https://doi.org/10.3389/fpubh.2025.1560361>
- Bakar, A. A., Rapi, M. A. A. M., & Sallehuddin, M. R. (2020). Property Inheritance Management: Issues Unclaimed Property. *Webology*, 17(2), 874–881. <https://doi.org/10.14704/WEB/V17I2/WEB17073>
- Bondar, A., Tolchieva, H., Bilyk, M., Slavkova, O., & Symonov, V. (2024). The Role of Digitization in Management and Strategic Decision-Making in Modern Management. *Financial and Credit Activity: Problems of Theory and Practice*, 2(55), 214–227. <https://doi.org/10.55643/fcaptp.2.55.2024.4349>
- Chen, A., Li, L., & Shahid, W. (2024). Digital transformation as the driving force for sustainable business performance: A moderated mediation model of market-driven business model innovation and digital leadership capabilities. *Heliyon*, 10(8), e29509. <https://doi.org/10.1016/j.heliyon.2024.e29509>
- Chern, B. T. P., Aun, T. B., Po-Lynn, E. L., & U-Jin, C. (2024). Assessing the General Sentiment of Malaysian Manufacturers in Adopting Blockchain Technology to Improve Supply Chain Processes. *Journal of Advanced Research in Applied Sciences and Engineering Technology*, 40(1), 64–73. <https://doi.org/10.37934/araset.40.1.6473>
- Corne, A., Massot, V., & Merasli, S. (2023). The determinants of the adoption of blockchain technology in the tourism sector and metaverse perspectives. *Information Technology and Tourism*, 25(4), 605–633. <https://doi.org/10.1007/s40558-023-00263-y>
- Curnin, S., & Owen, C. (2013). A typology to facilitate multi-agency coordination. *ISCRAM 2013 Conference Proceedings - 10th International Conference on Information Systems for Crisis Response and Management*, May, 115–119.
- Drs Nasrul, M. A., Md Said, M. H., Abdul Hak, N., & Mohd Salim, W. N. (2019). Family disputes in administration of estates: Analysis on mediation as effective dispute resolution mechanism in Malaysia. *Malaysian Journal of Consumer and Family Economics*, 23(Special Issue 1), 15–32.
- Dylus, E. P. (2019). The international blockchain registry of mobile assets. *Air and Space Law*, 44(1), 45–52. <https://doi.org/10.54648/aila2019003>
- English, L., Yunusa-Kaltungo, A., Kidd, M., & Labib, A. (2022). Development of a complementary framework for implementing asset register solutions. *Engineering Reports*, 4(6), 1–17. <https://doi.org/10.1002/eng2.12493>

- Farkhondehmaal, F., & Salado, A. (2020). Efficient Population of the Verification Tradespace Using Bayesian Inference. *IEEE Systems Journal*, 14(3), 3225–3232. <https://doi.org/10.1109/JSYST.2019.2932916>
- Fatin Afiqah, M. A., & Mohammad Tahir Sabit, M. (2015). The possible conflicts of property rights affecting the distribution of estates Muslims. *Proceedings of the 26th International Business Information Management Association Conference*.
- Gasco-Hernandez, M., Gil-Garcia, J. R., & Luna-Reyes, L. F. (2022). Unpacking the role of technology, leadership, governance and collaborative capacities in inter-agency collaborations. *Government Information Quarterly*, 39(3), 101710. <https://doi.org/10.1016/j.giq.2022.101710>
- Grobler-Dębska, K., Mularczyk, R., Gawęda, B., & Kucharska, E. (2025). Time Series Methods and Business Intelligent Tools for Budget Planning—Case Study. *Applied Sciences (Switzerland)*, 15(1). <https://doi.org/10.3390/app15010287>
- Hasbullah, M., Ismail, A. M., Salleh, A. Z., Zakaria, M. Z., Musa, Z. M., Nasir, M., Majid, A., Amlin, N., Ghani, A., Science, U., & Nilai, B. B. (2021). The model of faraid one-stop centre (FOSC). *Malaysian Journal of Syariah and Law* |, 9(1), 114–124.
- Hassan, N. H. M., Ahmad, K., & Salehuddin, H. (2020). Diagnosing the issues and challenges in data integration implementation in public sector. *International Journal on Advanced Science, Engineering and Information Technology*, 10(2), 529–535. <https://doi.org/10.18517/ijaseit.10.2.10271>
- Hofmann, F., Wurster, S., Ron, E., & Böhmecke-Schwafert, M. (2017). The immutability concept of blockchains and benefits of early standardization. *Proceedings of the 2017 ITU Kaleidoscope Academic Conference: Challenges for a Data-Driven Society*, ITU K 2017, 2018-Jan, 1–8. <https://doi.org/10.23919/ITU-WT.2017.8247004>
- Hulin, K., & Hu, Y. (2012). Maintaining soundness in hybrid verification approaches for stateful models: A case study. *EAMTA 2012 - Proceedings of the Argentine School of Micro-Nanoelectronics, Technology and Applications 2012*, 52–57.
- Kabashkin, I., Perekrestov, V., & Pivovarov, M. (2025). Data Conversion Strategies for Effective Aviation Technical Support as a Service. *Applied Sciences (Switzerland)*, 15(3). <https://doi.org/10.3390/app15031638>
- Kholodov, O., Usenko, L., & Kholodova, M. (2021). Budget support as a tool for innovative and technological development of agriculture in Russia. *E3S Web of Conferences*, 273. <https://doi.org/10.1051/e3sconf/202127308078>
- Knowles, B. (2016). Emerging Trust Implications of Data-Rich Systems. *IEEE Pervasive Computing*, 15(4), 76–84. <https://doi.org/10.1109/MPRV.2016.68>
- Kulkarni, A. U., Salado, A., & Wernz, C. (2022). Optimal verification strategies in multi-firm projects. *Systems Engineering*, 25(3), 254–270. <https://doi.org/10.1002/sys.21615>
- Kusrin, Z. M., Muda, M. Z., Laluddin, H., & Mohammad, A. B. (2012). Comment conversion and the conflict of laws in respect of spouse rights to inheritance in Malaysia. *Religion and Human Rights*, 7(1), 1–9. <https://doi.org/10.1163/187103212X625660>
- Maimanah, Al-Amruzy, M. F., Faridah, S., & Arni. (2024). Delay in the Division of Inheritance: a Theoretical Review Within Legal System Framework in Indonesia. *Sharia: Journal of Law and Thought*, 24(1), 241–257. <https://doi.org/10.18592/sjhp.v24i1.12916>
- Mata, P. N., Razali, M. N., Neves Mata, P., Muhammad, ;, Razali, N., Dantas, R. M., Mário, ;, Mata, N., Jalil, R. A., Martins, J. M., Zainuddin, A., Norhidayah, ;, & Yunos, M. (2022). Blockchain Technology For Improving Land Registration System In An Emerging Economy. *Webology*, 19(2), 4079.

- <https://repositorio.ipl.pt/handle/10400.21/14761%0Ahttp://www.webology.orghttp://www.webology.org>
- Mkuhlana, X., & Jowah, L. E. (2022). The Role of Budgeting Systems on Successful Project Execution At a Selected Government Department in the Cape Metropolis. *European Project Management Journal*, 12(1), 13–31. <https://doi.org/10.56889/tkoe4882>
- Naji, M., Thiruchelvam, S., & Khudari, M. (2025). The Effects of Internet Service Criteria on Institutional Performance. *Iraqi Journal for Computer Science and Mathematics*, 6(2), 188–202. <https://doi.org/10.52866/2788-7421.1255>
- Narayanan, U., Veettil, N. P., Krishnankutty, R. T., Sunny, L. E., & Paul, V. (2024). Mitigating Privacy and Security Risks in the Era of Big Data: A Comprehensive Framework of Best Practices and Protocols. *Journal of Computer Science*, 20(9), 1121–1145. <https://doi.org/10.3844/JCSSP.2024.1121.1145>
- Nasrul, M. A. B. D., Said, M. H. M., Hakand, N. A., & Salim, W. N. M. (2019). Family disputes in administration of estates: Analysis on mediation as effective dispute resolution mechanism in Malaysia. *Malaysian Journal of Consumer and Family Economics*, 23(Special Issue 1), 15–32.
- Norbu, T., Park, J. Y., Wong, K. W., & Cui, H. (2024). Factors Affecting Trust and Acceptance for Blockchain Adoption in Digital Payment Systems: A Systematic Review. *Future Internet*, 16(3), 1–21. <https://doi.org/10.3390/fi16030106>
- Oliver, K. (2016). It's Not Just About Technology: The People Side of Digitization. *Shaping the Digital Enterprise: Trends and Use Cases in Digital Innovation and Transformation*, 1–335. <https://doi.org/10.1007/978-3-319-40967-2>
- Paul, T., Mondal, S., Islam, N., & Rakshit, S. (2021). The impact of blockchain technology on the tea supply chain and its sustainable performance. *Technological Forecasting and Social Change*, 173. <https://doi.org/10.1016/j.techfore.2021.121163>
- Privara, A., Mészáros, R., & Rahmat, N. R. (2025). From digital investment to economic performance: insights from EU25 economies. *Review of Accounting and Finance*, August. <https://doi.org/10.1108/RAF-02-2025-0049>
- Quintana, O. E., Euler, N. D. R., & Varona, R. C. (2014). Federalism and Legal Unification in Mexico. In *Ius Gentium* (Vol. 28). https://doi.org/10.1007/978-94-007-7398-1_13
- Roesler, S. M. (2016). State standing to challenge federal authority in the modern administrative state. *Washington Law Review*, 91(2), 637–702.
- Rojas, J. B., Carrasco, D. N. D., Saldaña, C. M. A., Tananta, C. A. F., Vásquez, A. P., & Jimenez, K. M. A. (2024). Scientific Production on Budget Execution in Latin American Organizations. *Indian Journal of Information Sources and Services*, 14(4), 60–65. <https://doi.org/10.51983/ijiss-2024.14.4.10>
- Ruparel, H., Hosatti, S., Shirole, M., & Bhirud, S. (2021). Secure Voting for Democratic Elections: A Blockchain-Based Approach. *Lecture Notes in Electrical Engineering*, 733 LNEE (November 2024), 615–628. https://doi.org/10.1007/978-981-33-4909-4_47
- Salbiah, A. (2006). Islam in Malaysia : Constitutional and Human Rights Perspectives. *Muslim World Journal of Human Rights*, 2(1).
- Scholta, H., Halsbenning, S., & Niemann, M. (2025). A coordination perspective on digital public services in federal states. *Government Information Quarterly*, 42(1), 101984. <https://doi.org/10.1016/j.giq.2024.101984>
- Sergeeva, I. (2015). Specifics of accounting recognition and reflection of government assistance funds for agro-industrial complex organizations. *Asian Social Science*, 11(6), 144–149. <https://doi.org/10.5539/ass.v11n6p144>

- Shafie, F., Wan Yusoff, W. Z., & Al-Edrus, S. M. D. (2017). A framework study of Islamic Real Estate management for property inheritance in Malaysia. *Journal of Engineering and Applied Sciences*, 12(7), 1710–1714. <https://doi.org/10.3923/jeasci.2017.1710.1714>
- Shah, D. A. H., & Tan, K. Y. L. (2021). Indigenous Interactions. *Judicial Review of Administrative Action Across the Common Law World*, May, 234–254. <https://doi.org/10.1017/9781108674355.014>
- Stoyanov, K. (2024). Digitisation and blockchain adoption in Bulgarian animal farms. *BIO Web of Conferences*, 149. <https://doi.org/10.1051/bioconf/202414901040>
- Sultanum, N., Bromley, D., & Correll, M. (2024). Data Guards: Challenges and Solutions for Fostering Trust in Data. *Proceedings - 2024 IEEE Visualization Conference - Short Papers, VIS 2024*, 56–60. <https://doi.org/10.1109/VIS55277.2024.00019>
- Supranee, S., & Rotchanakitumnuai, S. (2017). The acceptance of the application of blockchain technology in the supply chain process of the Thai automotive industry. *Proceedings of the International Conference on Electronic Business (ICEB)*, 2017-Decem, 252–257.
- Weinstein-tullt, J. (2018). State Bureaucratic Undermining. 1(5), 1083–1137.
- Werner, F., Basalla, M., Schneider, J., Hays, D., & Vom Brocke, J. (2021). Blockchain Adoption from an Interorganizational Systems Perspective—A Mixed-Methods Approach. *Information Systems Management*, 38(2), 135–150. <https://doi.org/10.1080/10580530.2020.1767830>
- Yazid Ahmad, M., Nasran Mohamad, M., Azraai Jamsari, E., Zulkifli Wan Hassan, W., Zamro Muda, M., & Izhar Ariff Mohd Kashim, M. (2018). Confronting the Problem of Managing Unclaimed Inheritance Property of Muslims in Malaysia. *International Journal of Civil Engineering and Technology*, 9(4), 1459–1466. <http://iaeme.comhttp://iaeme.com>