A Blockchain-enabled Integration Framework for Estate Distribution in Malaysia

Syahirah Balqis Anuar[1], Fatin Afiqah Md Azmi[2], Nurul Athirah Badrul Hisham[3]

[1]Department of Real Estate, Universiti Teknologi Malaysia (UTM), Malaysia

[2]Centre for Real Estate Studies (CRES), Institute for Smart Infrastructures and Innovative Construction (ISIIC), Universiti Teknologi Malaysia (UTM), Malaysia

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ABSTRACT

Efficient administration of small estates in Malaysia is characterized by the complications of the hybrid processes between manual and digital administration, and fragmentation of jurisdiction. This paper examines the operational bottlenecks in the existing system of estate distribution coordinated by the Department of Director General of Lands and Mines (JKPTG) as being the challenges of manual verification, absence of integration of the agencies across states, and security of documents as the major impediments to effective governance. In order to overcome these issues, the paper will offer the Integrated Estate Governance Framework (IEGF) an architectural improvisation based on the Small Estates (Distribution) Act 1955. The framework emerged as a result of adopting a Design Science Research (DSR) approach to the development of the study through the qualitative knowledge of senior officers in the JKPTG in a variety of states. The IEGF integrates a Consortium Blockchain with an AI Engine (to support decisions), Smart Contracts (to automate workflows) and Decentralized Identifiers (DID) with ECDSA (to perform secure authentication). The architecture is designed to be privacy and storage efficient by using Zero-Knowledge Proofs (ZKP) and InterPlanetary File System (IPFS). Findings show that the IEGF allows the jurisdiction-independent application process and automatic title endorsement through the e-Tanah integration. The paper has come up with the conclusion that a combination of these technologies offers a scalable, transparent, and robust solution to modernize the national land administration.

Keywords— Small Estate Distribution, Consortium Blockchain, Artificial Intelligence, Smart Contract

INTRODUCTION

The administration of deceased estates in Malaysia is currently navigating a period of significant legislative and digital transition. Historically, the process has been characterized by jurisdictional complexities and administrative fragmentation across three primary bodies: the Civil High Court, Amanah Raya Berhad, and the Small Estate Distribution Section of the Department of Director General of Lands and Mines (JKPTG) (Idris Shazali, 2024). Within this framework, small estates—defined as those consisting wholly or partly of immovable property—account for the vast majority of inheritance cases that impact the socio-economic mobility of heirs and the fluidity of the national property market (Nasrul et al., 2023).

The Malaysian government has progressively addressed these administrative bottlenecks through the Small Estates (Distribution) (Amendment) Act 2022, which officially came into force in July 2024 (Malaysian Bar, 2022). This amendment significantly expanded the jurisdiction of the Estate Distribution Officer (EDO) by raising the value threshold for "small estates" from RM2 million to RM5 million, while also streamlining procedures by including movable property within its scope (Nasrul et al., 2023). Furthermore, the transition from legacy systems like MyeTaPP to the MyLand Portal in late 2023 was intended to centralize petition submissions and automate workflows (JKPTG, 2023).

Despite these digital advancements, persistent challenges remain, including "semi-manual" verification cultures, a lack of real-time inter-agency integration between federal and state-level e-Tanah registries, and concerns

regarding data integrity (Azmi, 2025). The existing centralized architecture of the MyLand system still requires human intervention for data validation across disparate nodes like the National Registration Department (JPN) and the Civil Courts. Industry 4.0 technologies, particularly blockchain, have been recognized as transformative tools for achieving transparency and automation in this dual legal estate system (Azmi et al., 2025). This aligns with the National Blockchain Roadmap 2021–2025, which identifies identity verification and smart contracts as critical drivers for Malaysia's digital transformation (MOSTI, 2022).

To bridge this "Integration Gap," this study proposes the Integrated Estate Governance Framework (IEGF), an architectural model that synergizes Consortium Blockchain and Artificial Intelligence (AI). By integrating Decentralized Identifiers (DID) for secure authentication, Zero-Knowledge Proofs (ZKP) for privacy-preserving verification, and the InterPlanetary File System (IPFS) for immutable document storage, the IEGF provides a secure and automated pathway for estate distribution process. This framework aims to transform the role of JKPTG from a manual administrative processor to a high-integrity validator, ensuring a faster and more transparent estate distribution for the public.

LITERATURE REVIEW

The management of estate in Malaysia is currently at the crossroads, because the current systemic failures have led to freezing of assets on a national level. This crisis is marked by the huge amount of arrears of assets, complicated inter-agency bureaucracy, obscurity of data and the increased number of fraud cases-all of them jeopardize the national land administration system integrity.

This RM90 billion amount of asset frozen is not just a simple statistic, but it is dead capital that is crippling domestic economy potential (Utusan Malaysia, 2025a). This is due to the freezing, which leaves the assets of immovability like agricultural land and residential lots without any heirs to generate income and enable their economic survival (Utusan Malaysia, 2025b). Such a scenario continues the cycle of poverty especially to the B40 sector of society who cannot sell these assets to fund their education or business capital (Berita RTM, 2025).

One of the main reasons why it is delayed is the fact that there are bureaucratic silos and lack of jurisdiction. There are several institutions to go through whose roles overlap with each other, such as the Syariah Court (faraid certificate), the Department of Director General of Lands and Mines (JKPTG) (small parcels), the Civil High Court, and Amanah Raya Berhad, as well as several State Land Offices (Abu Bakar et al., 2020).

Investigations by Rony and Mohd Shukor (2019) have observed that half of heirs believe that such processes are too complex to understand. Such complexity is added by the lack of consistency in the information management between departments when collected data is rarely shared or updated across agencies (Hasbullah, 2021). In the case of rural people, the distance and lack of familiarity with the administrative practices adds to the lack of incentive to file a claim (Mohamad Al-Bakri, 2011). This results in most cases being postponed until there is the occurrence of the so-called layered deaths, which in turn multiplies the number of heirs exponentially and makes the distribution process even more difficult (Wan Abdul Halim, 2011).

The limitations of the current system that continues to use a method of hybrid (manual and digital) approaches pose serious threats in terms of integrity. Some of these documents, including death certificates, land grants, and faraid certificates, are often lost or hard to supply by heirs (Zulkafli & Ahmad, 2016). This issue is compounded by forgery and fraud crimes.

One example that was reported by Sinar Harian (2018) is how the forgery of signatures of heirs made it possible to illegally sell six lots of inherited land without the knowledge of other siblings, which led to losses of hundreds of thousands of ringgit. According to Low (2008), the legal system is a good target of white-collar crime by virtue of its dependence on physical signature on land instruments (like Form 14A). Moreover, Heir Hiding - when applicants cheat by not mentioning an heir of second wives or an heir via other marriages, is also a problem (Muhammad Saifullah & Mahamood, 2020). Heir verification does not render the database safe, and this renders it not only hard but also time-consuming due to the absence of the secure, immutable database.

To mitigate these security and effectiveness loopholes, the Malaysian estate management system needs to be

switched to a decentralized rather than centralized system. Blockchain technology is immutable, transparent, and audible and ensures that all documents and digital signatures (authenticated through ECDSA) cannot be violated (Guo and Yu, 2022).

Moreover, document classification and faraid calculation can be automated through the use of Artificial Intelligence (AI) and, as a result, will decrease the number of human mistakes and the need to involve intermediaries (Muhammad Saifullah and Mahamood, 2020). Through the combination of these technologies, with the help of the Integrated Estate Governance Framework (IEGF), the problem of duplicate faraid certificates, the lack of data transparency between the JKPTG and the National Registration Department (NRD) can be addressed through the use of a single version of the truth. Not only will this revive the collective trust in the system but it will also make sure that all the heirs who are entitled to their inheritance will have it within the shortest time possible and in a manner that is just and well supported by the Syariah system as well as the Civil system..

METHODOLOGY

The research design is anchored on Design Science Research (DSR) paradigm with the main contribution made in developing the framework of the proposed research, which is the systematic development and institutionalization of the Integrated Estate Governance Framework (IEGF) to solve the problem of the unclaimed estate land in Malaysia. The study takes a qualitative methodology, based on both primary and secondary sources to make sure that the framework is based on regulatory realities and practitioner expertise.

The main primary data sources are semi-structured interviews, whereas the main literature source is an integrative literature review, which identifies such constraints as governance and legal constraints. The sample size (n=6) of JKPTG senior estate administration officers was purposely chosen having at least five years of experience of operating the estate and direct exposure to MyLand system in federal and state branches in Kedah, Kuala Lumpur, Selangor, Negeri Sembilan, Johor, and Melaka. These participants gave authoritative information about workflow dependencies, evidenced bottlenecks, and governance issues.

Qualitative content analysis and thematic coding were employed to analyze the interview transcripts to identify recurring themes systematically, including inter-agency data silos, manual verification processes, document dependency failures, consensus bottlenecks under the Small Estates (Distribution) Act 1955 and did not have active procedural triggers. Although MyLand allows the use of standardized and traceable online submissions, respondents always mentioned that verifications are officer-based and screen-based and that the heirs must provide original documentation during hearings and exchange cryptographic proof or immutable audit trails. The results also show that confidentiality barriers are important in the protection and safety of National Registration Department (NRD) information impair effective verification and lead to the possibility of false statements being undetected, which creates unfair outcomes in favor of true heirs. These themes practiced by practitioners were the direct impact on the design logic of the IEGF that was measured by shortcoming-to-feature mapping.

The analysis has shown that a permissioned, federated blockchain layer through decentralized agency nodes and process orchestration by smart contracts has the potential to enhance auditability, data sovereignty, and minimize fraud opportunities and cross-state estate processing without necessarily revealing confidential data. This supports the place of blockchain as a governance requirement and not a mere technical enhancement.

RESULTS

The main deliverable of this paper is the Integrated Estate Governance Framework (IEGF), a DSR-based architectural artifact that will be used to overcome the administrative, legal, and verification bottlenecks that have been demonstrated in the client estate distribution practices in Malaysia. This framework proposes a Consortium Blockchain architecture, allowing synchronization of federal (JKPTG) and state (e-Tanah systems) land registries, with the purpose of maintaining the statutory demand of user-initiated petition (Form A) as the legal initiator of estate distribution. This architectural choice is a mirror of the Malaysian institutional reality where automation has to be balanced with the legally required agency of a human factor, so that the framework

would not be legally disruptive but be supportive of the jurisdiction. The IEGF positions blockchain and smart contracts as the integrity and orchestration layers of the backend, unlike fully automated inheritance engines, meaning that Syariah or civil decision authority is not being replaced by either.

The initial layer, the Institutional Layer, translates the Small Estates (Distribution) Act 1955 into digitally enforceable rules of governance, keeping Form A so that it meets the stipulation of legality that an interested party would have to petition to be distributed. This layer also documents the SOP and workflow standardization adopted by ISO and applied by JKPTG branches to ensure procedural cadence and accountability of the organization in every state. The second layer, the Interoperability Layer, solves the issue of inter-agency fragmentation by using the state e-Tanah registry as sovereign consortium nodes on a shared permissioned ledger. This will enable estate officers in one Malaysian state to conduct cross-border land title verification in real-time, as opposed to the existing dependency on jurisdiction in which verification even access is institutionally partitioned and confined to individual state offices.

The third layer, the Procedural Smart Contract Engine, incorporates automated validation logic, which is activated once Form A is submitted, allowing cryptographically verifiable queries to both National Registration Department (NRD) to authenticate death and the Civil High Court to check previous application records without revealing citizen records. The verification events are logged permanently, creating audit trails that are difficult to alter, and respondents have reported lacking this in the current hybrid manual-screen verification procedure. The fourth layer is the Output and Registry Endorsement Layer which allows blockchain-produced Form E distribution orders to serve as legally sanctioned registry update triggers, with Estate Distribution Officer (EDO) approval triggering a smart contract-authenticated API push to the respective e-Tanah consortium node and an instant update in land titles. This eliminates the after hearing reliance on heirs to supply physical original certificates so they can be finally manually checked, and causes less latency, loss of documents, and redundancy in administration, yet preserves legal authority of registries.

Lastly, the evaluation of the IEGF artifact was performed using shortcoming-to-feature traceability mapping and it was shown that a federated consortium ledger, driven by smart contract and cryptographic proof orchestration, could offer simultaneous confidentiality, institutional data sovereignty, risk of fraud and forgery reduction, continuity of claim inter-state and multi-jurisdictional estate governance sequencing. The findings confirm that the framework is not only technically practical, but also human-focused, legally-based, and institution-conscious, as it represents the expectations of operations of officers who handle estate land claims, and the dependencies of the inheritance governance ecosystem of Malaysia. Table 1 mapping the research problems to proposed architectural solutions.

Table 1: Comparison current system shortcomings and proposed IEGF interventions

Identified Shortcoming (Current Practice)	**IEGF Architectural Solution**
Manual Verification	Automated Validation via Smart Contract and Agency data pulls.
State Jurisdictional Silos	Distributed State Nodes allowing cross-state data synchronization.
Risk of Fraud and Forgery	Immutable Ledger and Decentralized storage preventing unauthorized alteration.
Limited Agency Integration	Consortium Network providing a “Single Version of Truth” across NRD, Court and ARB

Integrated Estate Governance Framework (IEGF) is a multi-layered socio-technical framework which aims at enhancing the integrity, privacy, and interoperability of the Malaysian ecosystem of the estate land distribution. The architecture combines six fundamental technologies, namely Decentralized Identity (DID), Elliptic Curve

Digital Signature Algorithm (ECDSA), Zero-Knowledge Proofs (ZKP), Artificial Intelligence (AI), Smart Contracts, and the InterPlanetary File System (IPFS) to comprise a high-integrity orchestration model of governance that is compliant with institutional confidentiality parameters, multi-jurisdictional processes, and evidentiary trust necessities of estate management.

The Identity and Security Layer is the first layer and it entails decentralized identity controls and cryptographic authentication to ensure user participation and institutional accountability. With Decentralized Identifiers (DIDs), heirs, estate executors, land officers and others verify their identity with self-controllable identity credentials instead of centralized login repositories and minimize exposure to identity theft, credential forgery, and database breaches. To this end, ECDSA has been developed as a foundational digital signature that, as of today, provides cryptographic signing and time-stamping of every transaction, such as Form A submissions, officer attestations, verification approvals, and registry update requests, and is irrevocably attributed to an authorized entity, thereby providing non-repudiation and provable authenticity throughout the distribution lifecycle.

Privacy and Intelligence Layer is the second layer, which provides confidential verification and anomaly detection without violating the sovereignty of raw personal data. Zero-Knowledge Proofs (ZKP) serve as privacy-sensitive verification shields, where MyLand-coordinated node queries can be verified with NRD/JPN to validate heir-deceased relationships; ARB or court nodes to confirm executor or compliance credentials, but only cryptographic evidence of validity is sent, instead of uncovered citizen records. Simultaneously, the AI rationale and detection engine performs as a smart governance filter, examining the petition information and supporting acts of structural flaws, suspicious behavioral trends, multiplicity of claims, fabricated statements, and non-reasoned conflicts on inheritance. Procedural decision-support provision to Estate Distribution Officers (EDOs) is also made through the AI layer, through semantic matching of the claims to statutory rules and case precedents that are a result of the Small Estates (Distribution) Act 1955, so that system intelligence does not override legal discretion.

The Execution and Storage Layer is the third layer that will operationalize workflow automation and document persistence that is tamper resistant. Smart Contracts constitute the procedural core of the IEGF and run sequential verification routing among agency nodes, such as death validation, land title validation, executor authority attestation, and overlapping claim detection and is such that transition to each stage will take place only when cryptographic validation requirements are met. IPFS is used as a decentralized off-chain vault to enable the support of a large file handling of the evidentiary without affecting system efficiency; the high value estate files including death certificates, wills, land titles, court orders, and supporting attachments are secured off-chain storage off the blockchain execution layer. The blockchain registry contains only the unalterable CID hash address of every document, allowing instant validation of the unaltered documents without duplicating raw documents and file-transfer delays amongst the agencies.

Lastly, the conceptualized summary of the framework evaluation is presented in Table 2: Technical Synergy and Impact on Findings, indicating how the integrated layers address the bottle necks as given by practitioners, such as inter-agency data silos, manual verification loops, initiating claims according to jurisdiction, risking document loss, and creating surfaces to forgery Artificial Procedural Deadlocks. Each of the technologies is listed in the table as a governance enabler, and the framework demonstrates its ability to ensure agency confidentiality, achieve cross-state estate continuity, enhance verification trust, and automate the registry endorsement triggers, which confirms the IEGF as a legally grounded and institution-conscious artefact that can convert the manual-digital process of establishing and maintaining estate land in Malaysia into an integrated, high-quality, privacy-aware governance ecosystem.

Table 2: Summarizes how ‘Integrated Architecture’ solves the current problem

Technical Component	**Purpose in IEGF**	**Finding Addressed (Problem Solved)**
AI Engine	Anomaly detection & legal vetting	Manual verification and human error

Smart Contract	Workflow automation (Agency-to-Agency)	Delayed integration between agencies
DID & ECDSA	Secure identity and digital signatures	Risk of fraud and document forgery
ZKP	Privacy-preserving verification	Concerns over data privacy and red tape
IPFS	Tamper-proof document storage	Auditability of physical land titles

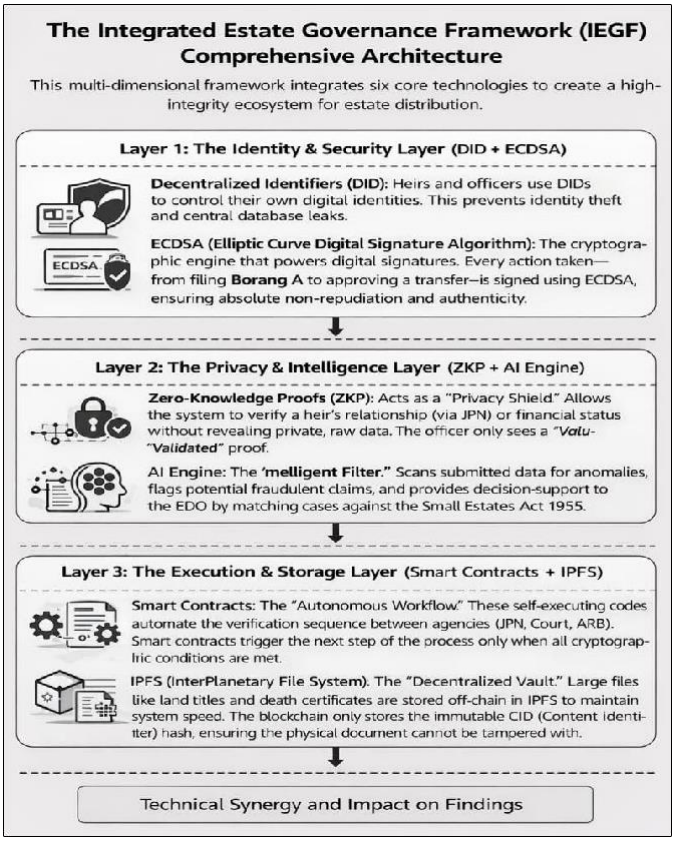

Fig. 2 The Integrated Estate Governance Framework (IEGF) Comprehensive Architecture

CONCLUSIONS

The paper sets the Integrated Estate Governance Framework (IEGF) as a socio-technical piece of governance artifact that can be used to transform the current processes of distributing estate land in Malaysia to become a high-integrity, federated ecosystem based on a document-dependent, centralized workflow. The framework was built according to the Design Science Research (DSR) paradigm and is not supposed to substitute the institutional authority but to supplement it to address the practical constraints, legal obligations, and trust dependencies of the estate officers that work under the jurisdiction of federal and state authorities. The results indicate that the bottlenecks of the estate land in Malaysia are not a result of lack of digitization of land but the lack of privacy-sensitive inter-agency coordination, inter-state claim continuity, and active initiation of processes. The IEGF thus reframes past administrative practices into an increasingly responsible stream of digital governance, in which agencies have data sovereignty but share in a common layer of proof.

The architecture proposed builds upon traditional legal informatics by integrating consortium blockchain nodes, AI-assisted support of reasoning, zero-knowledge proof (ZKP) authentication, and IPFS-attracted evidentiary hashing so that verification may be made without necessarily any disclosure of confidential records of citizens. The addition of decentralized identity (DID), ECDSA signatures and cryptographic audit trails enhance the procedural accountability of an estate officer position so that they can become institutional validators and decision stewards of the estate instead of their current position as manual authenticators of documents in an office and access point to fraud surfaces. The functionality of the framework operationally empowers land

officers with both the option to concentrate on evidentiary legitimacy, the heir consensus governance, and the jurisdictional integrity, within state e-Tanah registries, as opposed to the physical dependence on the paper documents.

Finally, the IEGF will offer a more scalable, institutionally conscious, and legally grounded way of creating a more responsive Malaysian land administration ecosystem, with process activation, inter-state verification and inter-agency proof exchange taking place in legally sequential, auditable cadence and human-friendly governance alignment. The framework adds a pragmatic roadmap of transforming the existing system of estate lands allocation into a system characterized by procedural traceability, cross agency trust-enabling, and confidentiality-sensitive digital cooperation, a governance requirement of sustainable resolution of the estate problem in a multi-jurisdictional financial setting of Malaysia..

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REFERENCES

1. Abdul Rashid, R., & Yaakub, N. I. (2010). Settlement procedures for complex estate distribution: Issues and challenges in Malaysia. Journal of Islamic Law and Judiciary, 5(1), 45–62.
2. Abu Bakar, N., et al. (2020). The administration of small estates in Malaysia: A study on the efficiency of the Department of Director General of Lands and Mines (JKPTG). Journal of Legal Studies, 12(4), 88–105
3. Ainan Husnaa, M. (2020). Challenges in document verification for estate claims in the Land Office. [Master's Thesis, Universiti Teknologi MARA].
4. Anuar, S. B., Azmi, F. A. M., & Sidek, S. N. S. (2023). Blockchain Technology in Malaysian Estate Distribution: A Systematic Review. Lecture Notes in Networks and Systems, 584 LNNS (4), 352–365. https://doi.org/10.1007/978-3-031-25274-7_29.
5. Anuar, S. B. & Azmi, F. A. M. (2025). Forgery and Fraud in Malaysia's Estate Distribution Process. Springer.
6. Azmi, F.A.M., Oluwakayode, A.S., Anuar S.B., Ali, S.M. & Hisham, N.A.B. (2025). A Systematic Literature Review of Industry 4.0 Technology Applications in Malaysian Estate Distribution. Planning Malaysia.
7. Berita Harian. (2016). Harta pusaka beku meningkat RM60 bilion. Berita Harian Online.
8. Berita RTM. (2025). Isu pengurusan harta pusaka perlu ditangani, elak wujud konflik. Dicapai daripada https://berita.rtm.gov.my/
9. Guo, H., & Yu, X. (2022). A survey on blockchain technology and its security. Journal of Computer Science and Technology, 37(2), 315–336. https://doi.org/10.1007/s11390-022-1927-5.
10. Harian Metro. (2025). Langkah kurangkan harta tidak dituntut: Analisis pengurusan aset nasional. Harian Metro Online.
11. Hasbullah, M. (2021). Information silos in land administration: The case of Malaysian estate distribution. Journal of Public Administration and Governance, 11(3), 112–129.
12. Idris Shazali, K. H., Ibrahim, N., Ismail, M. N., Aziz, B., Aziz, S., & Mohamad, M. (2024). The roles and functions of JKPTG: The contribution of the Estate Distribution Section (BPP). International Journal of Academic Research in Economics and Management Sciences, 13(3), 350-362.
13. Ismail, N., & Mohamed, A. H. (2024). The roles and functions of JKPTG: The contribution of the Estate Distribution Section (BPP). International Journal of Academic Research in Economics and Management Sciences, 13(3), 350-362.
14. JKPTG. (2023, November 20). Announcement: Transition from MyeTaPP to MyLAND system. Department of Director General of Lands and Mines.
15. JKPTG. (2023). Manual Pengguna Portal MyLand: Transformasi Digital Pengurusan Tanah. Jabatan Ketua Pengarah Tanah dan Galian Persekutuan

16. Low, H. (2008). Signature forgery in land dealings: A persistent threat to the Torrens System in Malaysia. Malayan Law Journal, 2, i-xv.
17. Malaysian Bar. (2022). Significant changes to the Small Estates (Distribution) Act 1955. Circular No. 265/2022.
18. Md Yusof, M. (2008). The constraints of heirs in small estate distribution in Malaysia. National Seminar on Islamic Heritage Management.
19. Mohamad Al-Bakri, Z. (2011). Pengurusan Harta Pusaka: Masalah dan Penyelesaian. Pustaka Cahaya Kasturi.
20. MOSTI. (2022). National Blockchain Roadmap 2021-2025. Ministry of Science, Technology and Innovation Malaysia.
21. Muhammad Saifullah, A. S., & Mahamood, S. M. (2020). Masalah dan cabaran dalam pengurusan harta pusaka Islam di Malaysia: Satu analisis. Jurnal Syariah, 28(2), 223–256.
22. Nasrul, M. A. D., Shah, N. A. M. A., Yusoff, R. M., & Said, Helmi, M. (2023). Small Estates (Distribution) Act 1955: Analysis on the 2022 amendment and its effects over the inheritance management. IIUM Law Journal, 31(2).
23. Rony, S., & Mohd Shukor, M. (2019). Perception of heirs on the complexity of the Malaysian estate distribution process. Journal of Wealth Management and Islamic Finance, 4(1), 12–25.
24. Sabirin, S. (2014). RM52 billion inheritance remains unsettled. The Star Online.
25. Selangorkini. (2022). Inisiatif lantikan kakitangan kontrak kurangkan tunggakan kes pusaka. Media Selangor.
26. Utusan Malaysia. (2025a). RM90b harta pusaka tak dituntut ancam ekonomi domestik. Dicapai daripada https://www.utusan.com.my.
27. Utusan Malaysia. (2025b). Harta tidak bergerak, potensi ekonomi terbantut. Dicapai daripada https://www.utusan.com.my/
28. Wan Abdul Halim, W. (2011). The phenomena of layered deaths and its impact on estate distribution timeframes. [Conference Paper].
29. Zulkafli, N., & Ahmad, S. (2016). Document security in the Malaysian land office: Issues of lost and tampered records. Journal of Property and Land Law, 8(1), 45–58