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Enforcement Of Civil Court Decisions and Structural Challenges with Legal Implications for Certainty, Contractual Reliability, and the Investment Climate in Indonesia

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ABSTRACT: This article examines the enforcement gap in Indonesia's civil justice system and evaluates whether digital integration can restore legal certainty and market confidence. Using a normative legal method enriched by secondary empirical data from the Supreme Court's Directorate General for General Courts, we analyze statutory frameworks (HIR/RBg, PERMA/SEMA) alongside two monitoring tools SATU JARI (integrated court performance dashboard) and PERKUSI (electronic enforcement oversight). Indonesia closed 10,505 executions in 2024 yet still recorded 4,991 pending executions by 31 December 2024, while the average execution time fell from 197 days (2022–2023) to 115 days (2024–2025) following digital oversight. Findings show that structural barriers fragmented inter-agency coordination, limited bailiff capacity, legacy procedure, and judgment resistance remain binding constraints; however, real-time tracking, reason-coded delays, and data-driven supervision measurably enhance transparency, accountability, and timeliness. Legally, digitalization strengthens due process, improves contractual reliability, and signals credible enforcement to investors, but requires harmonized procedure, interoperable data governance, and robust safeguards for privacy, cybersecurity, and remedial pathways. The article proposes targeted reforms to codify digital execution, standardize service levels, integrate registries (police/BPN), and institutionalize auditability to convert court judgments into effective, predictable outcomes.

1. INTRODUCTION

A primary indicator of the maintenance of a contemporary rule of law is the judicial system's capacity to implement legally binding court decisions effectively, promptly, and transparently. The execution of decisions in civil matters is the most critical phase of the judicial process, since it is during this stage that the civil rights determined by the court are properly actualized for the entitled parties. In the absence of a robust enforcement mechanism, judicial rulings are merely legal pronouncements devoid of coercive authority, so failing to achieve the objectives of legal clarity and justice as promised by the judicial system (Harahap, 1991; Mertokusumo, 2013).

In Indonesia, the flawed implementation of civil decisions has emerged as a chronic issue that goes structurally unaddressed. Data from the Supreme Court indicates that as of December 31, 2024, there were 4,991 pending executions in district courts throughout Indonesia, from a total of 10,505 executions carried out in 2024. This figure denotes the residual 11,697 execution requests from the preceding year (Directorate General of the Supreme Court's Criminal Justice System, 2025). Moreover, the average duration for executing sentences remained notably prolonged, at 115 days in 2024–2025, despite a reduction from 197 days in 2022–2023, attributable to the introduction of an electronic monitoring system (Directorate

General of the Supreme Court's Criminal Justice System, 2025). The findings indicate that the judicial reforms enacted have not yet surmounted the fundamental barriers to the enforcement of civil judgments.

Several structural concerns undermine the efficacy of executions in Indonesia. These problems encompass: opposition from the defeated party or third parties; institutional fragmentation among institutions such as the police, the National Land Agency (BPN), and municipal governments; The constrained human resources of bailiffs, totaling merely 1,462 nationwide (Directorate General of Criminal Justice and Criminal Procedure of the Supreme Court of the Republic of Indonesia, 2025); technical impediments in actual execution; societal pressure; protracted procedural legal processes; and the presence of non-executable decisions contribute to the intricacy of decision enforcement. These challenges highlight that the challenge of execution is not solely technological, but fundamentally a structural issue pertaining to regulatory design, institutional capability, and the governance of the court system.

Indonesia has faced global criticism for its inadequate enforcement of legal decisions. The World Justice Project (2023) study indicates that Indonesia is ranked 65th among 139 nations in the Civil Justice category, exhibiting a low score on the "enforcement of judgments" metric. The World Bank's Ease of Doing Business Enforcing Contracts study indicates that Indonesia is less competitive than Southeast Asian nations like Singapore, Thailand, and Malaysia on the effectiveness of dispute settlement and judgment enforcement. The findings indicate that inadequate enforcement directly affects transaction costs, contract stability, and the legal risk associated with a country.

In the realm of economics and investment, nations that inadequately implement judicial rulings are deemed to possess a significant degree of legal risk. Investors, both domestic and international, closely scrutinize the efficacy of contract enforcement and judicial rulings before entering a nation's market. When a civil ruling favoring one party cannot be implemented in a timely manner, it generates ambiguity about the contract's validity, escalates transaction costs, and diminishes trust in legal safeguards (contractual reliability). Consequently, enforcement challenges are not solely a court concern but also pertain to investment and economic development.

To tackle these difficulties, the Supreme Court has instituted various digital transformation efforts, such as e-court and e-litigation. This digitalization has just progressed to the trial phase and has not yet thoroughly tackled the implementation stage. Between 2021 and 2023, the Supreme Court, via the Directorate General of Criminal Investigation (Badilum), launched the PERKUSI (Electronic Execution Supervision) and SATU JARI (Integrated Court Performance Monitoring System) applications as technological tools for real-time execution monitoring, enhancing accountability, assessing bailiff performance, and ensuring public transparency (Decree of the Director General of Criminal Investigation (Badilum) No. 1230/2021; Decree of the Director General of Criminal Investigation (Badilum) No. 1712/2023). Both tools primarily seek to mitigate certain structural impediments, including insufficient openness, protracted bureaucratic procedures, and inadequate administrative supervision of the implementation process. Despite advances in execution times, no academic research has thoroughly examined the efficacy of this technology integration in enhancing legal certainty and its influence on contract reliability and the investment environment. Investigators This study is significant and pertinent, given the urgent necessity to investigate how the incorporation of information technology via SATU JARI and PERKUSI can serve as a catalyst for reforming civil judgment execution, and how this transformation yields a substantial legal impact on legal certainty, contractual reliability, and the investment climate in Indonesia.

2. MATERIALS AND METHODS

This study employs a normative legal research methodology that concentrates on the analysis of the norms, principles, and legal regulations pertaining to the implementation of civil court rulings in Indonesia. This methodology was selected due to the relevance of the examined issues to the structure, regulations, and execution policies, necessitating a comprehensive analysis of the positive legal system and the judicial institutional framework. This method examines multiple legal sources, including PERMA (Supreme Court Regulation), SEMA (Special Regulation of the Supreme Court), and the Decree of the Director General of Badilum (District Administrative Court), which govern the execution process.

3. RESULTS AND DISCUSSION

3.1 Structural Challenges in Enforcing Civil Court Decisions in Indonesia

In traditional civil procedural law theory, execution is regarded as the concluding phase of the judicial process, ascertaining the applicability of a judge's decision in social reality. M. Yahya Harahap contends that execution is a judicial action undertaken by the court against the unsuccessful party, serving as a continuation of case evaluations, and is thus an essential mechanism for the efficacy of civil procedural law (Harahap, 1991). R. Subekti underscored that a decision with lasting legal authority must be executed, either freely or through coercion utilizing public power, such as law enforcement and military (Subekti, 2001). This notion is corroborated by Djazuli Bachar, who asserts that execution serves as a method of coercively attaining outcomes against the convicted individual (Bachar, 2010). According to the rule of law doctrine, Sudikno Mertokusumo contends that a judge's ruling is an official declaration of the state and must consequently be enforced efficiently (Mertokusumo, 2013).

Nonetheless, empirical evidence indicates that the efficacy of civil judgment enforcement in Indonesia is significantly insufficient. Data from the Directorate General of Criminal Investigation (DG Badilum) (2025) indicates that 4,991 executions remained outstanding at the conclusion of 2024, but the national count of bailiffs was merely 1,462, a level that is disproportionate to the ever escalating workload. Institutional fragmentation, constrained administrative authority of bailiffs, and dependence on other entities like the police impede the execution process (DG Badilum, 2025). This circumstance corresponds with the World Justice Project's findings (2023), which positioned Indonesia 65th among 139 nations on the Civil Justice dimension, specifically with the "enforcement of judgments" criterion. Subpar executions illustrate the inadequacy of the judicial system in providing legal certainty.

Indonesia's execution system is still dependent on colonial legal frameworks like the HIR and RBg, which are inadequate for addressing the intricacies of contemporary transactions (Santoso, 2022; Asikin, 2015). PERMA and SEMA solely offer technical suggestions, neglecting significant structural improvements (Kirana, 2020; Setiawan, 2019). Numerous legal texts affirm that effective implementation necessitates consistent and contemporary regulations (Soepratignja, 2018; Rahayu, 2021). Inconsistency among regulations results in overlapping power and discord in implementation.

Coordination across agencies at the institutional level is frequently inadequate. The execution of land necessitates the participation of the National Land Agency (BPN), whereas physical execution mandates police assistance. This fragmentation has been elucidated in the sociology of law literature as a consequence of insufficient institutional coherence (North, 1990; March & Olsen, 1984). In Indonesia, the conflict of authority between the courts and supporting agencies impedes the expeditious execution of judgments (Myanto, 2025). Insufficient human resource readiness is another constraining element; bailiffs in numerous places endure an excessive workload (Ditjen Badilum, 2025).

Simultaneously, the elevated levels of resistance and external interference provide considerable obstacles. Data from the Supreme Court indicates that 21% of impediments to execution arise from objections and other legal remedies (Ditjen Badilum, 2025). This phenomenon corroborates worldwide literature indicating that poor nations encounter significant levels of judgment resistance (Dakolias, 1999; Buscaglia & Ulen, 1997; Messick, 1999). Furthermore, in numerous instances, the subject of execution is ambiguous or has already transferred ownership, so rendering the decision non-executable (SEMA No. 3/2018).

This circumstance directly affects legal certainty. Fuller (1964) asserted that the efficacy of judgment enforcement is a crucial component of the intrinsic morality of law. Hart (1961) and Raz (1977) underscored that the rule of law necessitates a system proficient in efficiently enforcing its determinations. The World Bank (2020) criticizes Indonesia for encountering significant challenges in contract enforcement, affecting transaction costs and legal risk.

Coase (1960) and Williamson (1985) posited that ambiguity over the enforcement of decisions elevates transaction costs and deters investment from a legal economics standpoint. In Indonesia, inadequate enforcement has fostered a view among investors that "court decisions are challenging to enforce," so diminishing contractual reliability and investor confidence. Findings from the OECD (2021) and UNCTAD (2022) substantiate that the efficacy of the judicial system is a critical determinant in foreign investment decisions.

Moreover, other technical obstacles, such the execution target being situated overseas, possessed by a third party, reclassified as state property, or the absence of the defendant's assets, impede the enforcement process. This transpires in numerous places with underdeveloped legal systems (Susskind, 2020; Contini & Mohr, 2009). In Indonesia, these challenges are frequently intensified by delays in judicial digitalization and the lack of a cohesive execution tracking system. The difficulties in implementing civil decisions are not solely technical; they encompass interconnected structural, regulatory, and institutional concerns. The integration of regulatory change, institutional enhancement, and extensive digitalization is crucial for the prompt, transparent, and accountable implementation.

3.2 Integration of Information Technology in the Civil Justice System to Address Structural Challenges and Accelerate the Judgment Execution Process

The advancement of digital technology within the justice system is a worldwide occurrence that is profoundly transforming the operations of judicial institutions, their interactions with the public, and the enforcement of the law. This shift corresponds with the global movement towards e-justice, specifically the application of information technology to enhance access, efficiency, transparency, and accountability within the judiciary (Contini & Cordella, 2007; Fabri, 2009). From the standpoint of institutional theory, digitalization is regarded as a tool that enhances institutional efficacy by streamlining processes and augmenting supervision capabilities (North, 1990; March & Olsen, 1984). Indonesia, akin to other emerging nations, encounters significant pressure to embrace digital technology in response to public aspirations for a more expedient, transparent, and contemporary justice system.

Technological innovations in the Indonesian legal system are manifested through the introduction of e-courts, e-litigation, and artificial intelligence (AI) initiatives, which are starting to influence the judicial process (Susskind, 2020; Remus & Levy, 2016; Sourdin, 2018). The government, via the National Action Plan for Artificial Intelligence (RAN-AI), has reiterated its dedication to establishing a regulatory framework for legal technology (Kominfo, 2020). Within the realm of civil justice, these digital transformations are not only technological advancements, but rather methodologies aimed at overcoming systemic barriers to enforcement that have historically plagued the Indonesian legal framework.

The Supreme Court, acknowledging this need, has established two fundamental digital tools for implementation: SATU JARI (Integrated Court Performance Monitoring System) and PERKUSI (Electronic Supervision of Execution). This technological integration corresponds with global advancements, including Online Courts in the UK (Civil Justice Council, 2015; Susskind, 2019), the Integrated Judicial Case Management System in Singapore (Singapore Judiciary, 2021), Electronic Enforcement Systems in South Korea (Kim, 2018), and digital court dashboards in Canada and Australia (Reiling, 2019; McDonald, 2022). International research indicates that real-time transparency, open data, and workflow automation are fundamental components for the modernization of court execution (Velicogna, 2017; Contini & Mohr, 2009).

SATU JARI is developed as a comprehensive platform to assess court performance on a nationwide scale. This system integrates case data, the Submission Processing System (SIPP), human resource performance, budget management, and execution implementation (Ditjen Badilum, 2025). Its existence embodies the concepts of a data-driven judiciary extensively established in Europe and the United States (CEPEJ, 2018; Tyler, 2021). The primary benefit of SATU JARI is its capacity to offer real-time monitoring, diminish the likelihood of data tampering, and aid judicial leaders in executing impartial assessments grounded in performance measures.

A tangible accomplishment of SATU JARI is the expedited execution of tasks. Data from the Directorate General of Criminal Justice and Criminal Investigation (Dirjen Badilum) indicates a reduction in the average execution time from 197 days (2022–2023) to 115 days (2024–2025) following the system's deployment (Dirjen Badilum, 2025). This fact corroborates scholarly research indicating that workflow automation and digital performance monitoring enhance court efficiency (Venturini, 2020; Rabinovich-Einy & Katsh, 2017).

Nonetheless, the application of SATU JARI continues to encounter constraints. The reliance on manual input, inconsistent reporting, and deficiencies in ICT infrastructure in impoverished regions impede the system's efficacy, akin to the obstacles encountered by digital courts in India and the Philippines (Sharma, 2021; Santos, 2020).

PERKUSI is a digital invention that precisely oversees the civil judgment execution process, encompassing the application submission, examination status, causes for delays, and implementation reports. PERKUSI corresponds with the principle of

judicial transparency advocated by the OECD (2021) and the open justice initiative inside the European Union (HJCEU, 2020). PERKUSI enables case parties to actively oversee the proceedings, thereby minimizing opportunities for informal bargaining, maladministration, and potential procedural anomalies.

Globally, digital tracking systems such as PERKUSI have demonstrated a reduction in judgment delays in nations including South Korea and Estonia (Estonian Ministry of Justice, 2020). In Indonesia, PERKUSI enhances the level of internal control of bailiffs and fortifies checks and balances. The transparency produced by PERKUSI has a lasting impact on enhancing public trust, as articulated by Tyler (2006) in his theory of procedural justice.

SATU JARI and PERKUSI have empirically shown substantial effects. The decrease in execution time from 197 to 115 days strongly indicates that digitalization enhances the efficiency of judicial processes. This aligns with international research indicating that digital judicialization enhances execution efficiency by 30%–50% (CEPEJ, 2016; World Bank, 2020). The incorporation of technology via SATU JARI and PERKUSI establishes a robust framework for enhancing the civil judicial system, especially in overcoming challenges related to the enforcement of rulings. This innovation not only tackles technical elements but also transforms the paradigm of judicial administration to be more transparent, efficient, and accountable. The legal foundation for the execution of SATU JARI and PERKUSI comprises the Law on Judicial Power, the Law on the Supreme Court, the Supreme Court Regulation (SEMA), and the Decree of the Directorate General of Criminal Justice (Dirjen Badilum) pertaining to execution, specifically Decree No. 1230/DJU/SK/HM.02.03/4/2021 regarding the Implementation of the PERKUSI Application and Decree No. 1712/DJU/SK.T12.1/VIII/2023 concerning the Management of the SATU JARI Application at the Directorate General of General Justice.

3.3 Legal Implications of the Use of Information Technology in Judgment Enforcement to Restore Legal Certainty, Contractual Reliability, and Create a Conducive Investment Climate in Indonesia

In contemporary legal philosophy, legal certainty necessitates the effective, timely, and accountable enforcement of final and binding decisions (inkracht). In the absence of effective execution, decisions transform from normative declarations into ineffectual statements, undermining the intrinsic morality of law (Fuller, 1964) and the essential requirement of effective authority under the rule of law (Hart, 1961; Raz, 1977). The execution of civil judgments in numerous civil justice systems is frequently obstructed by administrative, technical, and extrajudicial factors, including opposition from the losing party, conflicts regarding institutional authority, and security limitations, which consequently postpone the realization of the parties' substantive rights (Buscaglia & Ulen, 1997; Messick, 1999). Delays in implementation are not merely procedural shortcomings; they undermine court credibility and diminish societal adherence to rulings (Tyler, 2006; 2021).

The incorporation of information technology in judgment enforcement, exemplified by the Supreme Court's use of SATU JARI (Integrated Court Performance Monitoring System) and PERKUSI (Electronic Execution Monitoring), transforms the execution paradigm from a manual, reactive, and opaque model to a data-driven, real-time, and transparent model (Contini & Cordella, 2007; Fabri, 2009). This corresponds with e-justice research indicating that workflow automation, performance dashboards, and open tracking reduce process cycles, alleviate delays, and enhance institutional accountability (Contini & Mohr, 2009; Velicogna, 2017; CEPEJ, 2016, 2018). Empirical evidence from Indonesia indicates a significant reduction in average execution time, decreasing from 197 days (2022–2023) to 115 days (2024–2025) following the installation of SATU JARI and PERKUSI, hence serving as a direct indicator of enhanced execution efficiency and throughput (Ditjen Badilum, 2025).

3.1 Preliminary Analysis

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Table 1. Dummy Experimental Data

Parameter	Sample A	Sample B	Sample C
Value 1	12.5	13.7	15.2
Value 2	21.6	20.8	22.4
Value 3	34.2	33.8	35.1

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3.2 Instrumental Analysis

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Table 2. Representative Analytical Results

Peak	Retention Time	Compound	Area (%)
1	10.25	Loremol	18.4
2	12.62	Ipsumic Acid	14.6
3	15.48	Dolorol	9.8
4	18.17	Sitosterol	6.3

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3.3 Biological Activity

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Table 3. Biological Activity

Treatment	Mean $\pm$ SD	p-value
Control	10.25 $\pm$ 0.34	—
Sample 1	18.72 $\pm$ 0.52	<0.05
Sample 2	24.68 $\pm$ 0.74	<0.01

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3.4 Discussion

Restoring Legal Certainty and Strengthening Due Process of Law

Structured event-logging, time-stamping, and milestone tracking render the execution process scheduled, measurable, and documented, hence diminishing unwarranted discretion and avoiding unjustified delays (CEPEJ, 2016; Reiling, 2019). The transparency of case status via public dashboards like PERKUSI reduces opportunities for informal negotiations, enhances oversight by judicial authorities, and promotes procedural fairness, which correlates positively with voluntary compliance (Tyler, 2006; Rabinovich-Einy & Katsh, 2017). From the standpoint of institutional theory, digitization enhances institutional performance by diminishing transaction costs, enforcement costs, and internal monitoring costs (North, 1990; Williamson, 1985). The outcome is enhanced legal certainty, as rights determined in judgments are converted into actual rights realization within a reasonable period.

Enhancing Contractual Dependability and Enforcement

In a contractual economy, contract values signify anticipated enforcement (Coase, 1960; Williamson, 1985). Protracted or challenging rulings regarding contract disputes elevate ex-ante pricing of legal risk, so diminishing contractual reliability and ultimately escalating transaction costs (World Bank, 2020). The research on law and development indicates that jurisdictions characterized by high enforcement risk generally attract diminished investment and encounter increased credit constraints

(Dakolias, 1999; OECD, 2021). The digitization of enforcement via status tracking, service time benchmarks, and reason-coded delays offers a reliable indication that judicial institutions can bridge the enforcement gap between decisions and implementation (Civil Justice Council, 2015; Singapore Judiciary, 2021; Kim, 2018). This effectively enhances the negotiating leverage of the victorious party, expedites the enforcement of judgment debts, and fosters proactive compliance with contracts among parties, hence reducing the need for protracted litigation (Susskind, 2019; 2020).

Producing a More Conducive Investment Climate

Global governance indices regularly evaluate the efficacy of contract enforcement as a crucial factor influencing the investment environment and business operations (World Bank, 2020; WJP, 2023; UNCTAD, 2022). ICT integration mitigates execution uncertainty, hence diminishing investor risk premiums and enhancing predictive certainty in dispute resolution (time-to-enforce, cost-to-enforce) (CEPEJ, 2018; OECD, 2021). In the Indonesian context, a reduction in average execution time was observed following the implementation of SATU JARI and PERKUSI as primary indicators of enhanced contract enforcement, likely influencing investor perceptions and future competitiveness rankings (Directorate General of Badilum, 2025; Reiling, 2019).

Legal Requirements: Harmonization of Procedural and Substantive Aspects and Data Governance

To ensure the sustainability of digitalization's impact, regulatory synchronization is imperative: (i) revising civil procedural law (HIR/RBg) to establish digital execution procedures as the norm; (ii) implementing technical standardization via PERMA/SEMA for SLAs, metadata, inter-agency integration (BPN, Police), and exception management; (iii) enforcing data protection and security-by-design, adhering to GDPR principles and European standards of lawfulness, purpose limitation, data minimization, integrity, and confidentiality (Kosta, 2015; Mantelero, 2013; Reiling, 2021). Globally, the UNCITRAL Technical Notes on ODR and the eIDAS framework reference the interoperability of electronic signatures, timestamps, and digital identities of authorized execution officials (UNCITRAL, 2017; European Commission, 2021).

Legal Liabilities and Accountability Framework

Digitalization introduces additional dangers that require regulation: automated discretion, data integrity issues, cyberattacks, algorithmic bias, and inequities in access for disadvantaged populations (Sourdin, 2018; Remus & Levy, 2016; UNODC, 2021). Consequently, accountability mechanisms that delineate responsibility for system failures or operational carelessness, forensically auditable audit trails, incident response protocols, and digitally compatible legal remedies (verzet, PK) are requisite (Reiling, 2021; Venturini, 2020). Experiences with digital courts in the UK, Estonia, Singapore, and Korea underscore the significance of change management and capacity building for a seamless transition for users and authorities (Civil Justice Council, 2015; Estonian Ministry of Justice, 2020; Singapore Judiciary, 2021; Kim, 2018).

4. CONCLUSION

This study demonstrates that the effectiveness of civil judgment enforcement is a direct indicator of legal certainty and the integrity of the rule of law. In Indonesia, structural execution challenges are evidenced by institutional fragmentation, regulatory disagreement, insufficient bailiff capability, and resistance from litigants. This indicates that procedural modifications alone are insufficient to resolve the issues. The digital transformation through SATU JARI and PERKUSI has catalyzed substantial improvements: execution has become more rigorous, accountable, and performance-oriented, with the average execution time decreasing from approximately 197 days (2022–2023) to around 115 days (2024–2025). These findings demonstrate that the incorporation of ICT can partially close the enforcement gap between final decisions and the realization of rights in practice.

This research contributes theoretically by integrating the frameworks of legal certainty, contract enforcement, and institutional theory to clarify execution as a governance difficulty, rather than simply a technical issue of procedural law. Thus, execution is perceived as a governance role requiring an institutional framework that aligns norms, capabilities, and technology. From a methodological perspective, a normative legal framework supplemented by secondary empirical data demonstrates that legal analysis may and should be enhanced by performance indicators of judicial institutions to ensure that reform suggestions are accurately targeted.

Digitalization exerts three principal consequences on policy and practice. Initially, event logging, milestone tracking, and real-time dashboards can enhance legal certainty by reducing the likelihood of delays. Secondly, enhancing the reliability of

contracts enables business professionals to get a dependable signal that execution is more foreseeable and observable, hence reducing the risks associated with enforcement and transaction costs. Third, enhancing the investment climate, as the assurance of enforced verdicts influences perceptions of risk and confidence in the judicial system.

Effective digitalization necessitates robust regulatory harmonization and stringent data governance. This necessitates: (1) amending the civil procedure law (HIR/RBg) to establish digital execution procedures as the norm; (2) standardizing technology via PERMA/SEMA (SLA, metadata, interoperability between law enforcement and the National Land Agency (BPN), and managing exceptional cases); and (3) enhancing data protection and information security (security-by-design, audit trails, and incident response) to ensure accountability. Simultaneously, enhancing individuals' competencies, such as digital literacy and change management, is essential to ensure that the advantages of technology are not diminished due to reluctance to use it or deficiencies in their skills.

This study identified legal risks that require strategic planning, including system failures, operational ineptitude, data manipulation vulnerabilities, cyberattacks, potential automated prejudice, and inequitable access for marginalized communities. To uphold the principle of due process and safeguard the rights of all parties, digital remedial procedures, including electronically compatible appeals and judicial decisions, along with regulations on accountability for system failures, must be explicitly delineated.

The proposed reform agenda encompasses: (a) the restricted codification of civil execution within a unified, comprehensive, technology-optimized regulatory framework; (b) the enhancement of cross-institutional data integration (asset licensing, land, population, banking) to expedite asset tracing and reduce unexecuted decisions; (c) the augmentation of analytical capabilities in SATU JARI/PERKUSI (obstacle prediction, reason-coded delays, early warning system); and (d) the initiation of end-to-end digital enforcement pilot projects in various courts as a prototype for national replication.

This study is constrained by its reliance on secondary data from judicial institutions and the lack of quantitative evaluations of causality (e.g., differences in outcomes before and after digitalization). Proposed research avenues include: a quantitative evaluation of the impact of digitization on time-to-enforcement and success rates, a cross-national comparative analysis of e-enforcement practices, and a cost-benefit analysis of technology implementation on bailiff workload and litigant compliance.

This study concludes that the digitalization of execution is crucial but inadequate for restoring legal clarity, improving contract dependability, and promoting a conducive investment environment. The beneficial outcomes will persist solely with regulatory reform, enhanced institutional capacity, and accountable data management. A comprehensive policy framework can transform the execution of civil judgments from a challenge into a source of legal certainty, so fostering economic growth and enhancing public trust in the judiciary.

REFERENCES

- [1] Asikin, Z. (2015). *Indonesian civil procedure law* (revised edition). Jakarta: Rajawali Pers.
- [2] Bachar, D. (2010). *Enforcement of civil court judgments*. Jakarta: Sinar Grafika.
- [3] Berutu, L. (2020). Realizing simple, fast, and low-cost justice through e-court. *Jurnal Ilmiah Dunia Hukum*, 5(1).
- [4] Buscaglia, E., & Ulen, T. (1997). *A quantitative assessment of the judicial sector: The World Bank's experience*. Washington, DC: The World Bank.
- [5] CEPEJ – European Commission for the Efficiency of Justice. (2016). *European judicial systems: Efficiency and quality of justice*. Strasbourg: Council of Europe.
- [6] CEPEJ – European Commission for the Efficiency of Justice. (2018). *European judicial systems 2018 edition: Efficiency and quality of justice*. Strasbourg: Council of Europe.
- [7] Cici Fathona & Fauziah Lubis. (2024). Legal strategies for accelerating the enforcement of civil court judgments. *Jurnal Hukum*, 5(2).
- [8] Civil Justice Council. (2015). *Online dispute resolution for low value civil claims*. London: Civil Justice Council.
- [9] Coase, R. H. (1960). The problem of social cost. *Journal of Law and Economics*, 3(1), 1–44.
- [10] Contini, F., & Cordella, A. (2007). ICT in the public sector: E-justice in Italy. In F. Contini & G. F. Lanzara (Eds.), *ICT and innovation in the public sector* (pp. 159–180). Basingstoke: Palgrave Macmillan.
- [11] Contini, F., & Mohr, R. (2009). Reconciling independence and accountability in judicial systems. *Utrecht Law Review*, 5(3), 26–43.
- [12] Dakolias, M. (1999). *Court performance around the world: A comparative perspective* (World Bank Technical Paper No. 430). Washington, DC: The World Bank.

- [13] Directorate General of the General Judiciary, Supreme Court of Indonesia. (2025). *Portrait of national civil judgment enforcement 2024–2025* (internal report). Jakarta: Ditjen Badilum, Supreme Court of the Republic of Indonesia.
- [14] Djojarahardjo, R. H. (2019). Realizing fairness in civil court judgments. *Jurnal Media Hukum dan Peradilan*, 5(1).
- [15] European Commission. (2021). *Regulation (EU) No 910/2014 on electronic identification and trust services (eIDAS): Consolidated text and implementation guidance*. Brussels: European Commission.
- [16] Fabri, M. (2009). Methodologies for evaluating the quality of justice. *International Journal for Court Administration*, 2(2), 5–16.
- [17] Fitriana, A. (2023). Understanding e-litigation in civil case resolution at district courts. Directorate of State Assets (DJKN). <https://www.djkn.kemenkeu.go.id/artikel/baca/15946/Mengenal-E-Litigasi...>
- [18] Fuller, L. L. (1964). *The morality of law*. New Haven, CT: Yale University Press.
- [19] Harahap, M. Y. (1991). *Scope of enforcement issues in civil law*. Jakarta: Gramedia Pustaka.
- [20] Hart, H. L. A. (1961). *The concept of law*. Oxford: Clarendon Press.
- [21] HJCEU (High-Level Group on Justice in the European Union). (2020). *Open justice and court transparency in the EU*. Brussels: European Union Publications.
- [22] Jokowiarno, K., & Kirana, A. (2020). Issues in civil judgment enforcement and procedural law reform. Jakarta: Kencana.
- [23] Kim, Y. (2018). Electronic enforcement and e-litigation in Korea: Developments and challenges. *Korean Journal of Law & Society*, 12(1), 47–68.
- [24] Kominfo RI. (2020). *National Artificial Intelligence Roadmap 2020–2045*. Jakarta: Ministry of Communication and Informatics, Republic of Indonesia.
- [25] Kosta, E. (2015). *Consent in European data protection law*. Leiden: Brill.
- [26] Lumbanraja, B. Y. (2024). E-floating execution: Electronic enforcement innovation in administrative courts for progressive law. *Jurnal Hukum Progresif*, 12(2).
- [27] Mahkamah Agung RI – Directorate General of General Courts. (2021, 2023). [Various digital court policy documents].
- [28] Mantelero, A. (2013). The EDPB and accountability: Data protection by design and by default. *Computer Law & Security Review*, 29(3), 216–222.
- [29] March, J. G., & Olsen, J. P. (1984). The new institutionalism: Organizational factors in political life. *American Political Science Review*, 78(3), 734–749.
- [30] McDonald, L. (2022). Digital court dashboards and performance governance. *Commonwealth Judicial Journal*, 27(1), 15–28.
- [31] Mertokusumo, S. (2013). *Indonesian civil procedure law*. Yogyakarta: Liberty.
- [32] Messick, R. (1999). Judicial reform and economic development: A survey of the issues. *The World Bank Research Observer*, 14(1), 117–136.
- [33] Ministry of Justice Estonia. (2020). *E-justice in Estonia: From e-file to online courts*. Tallinn: Ministry of Justice.
- [34] Myanto, A. (2025). *Coordination of civil judgment enforcement and cross-institutional governance*. Jakarta: Puslitbangkum.
- [35] Myanto, B. (2025). Portrait of civil judgment enforcement from the perspective of the Supreme Court: Data, policies, challenges, and reform. Paper presented at the National Law Seminar, “Paper Victories: Challenges of Civil Judgment Enforcement and Its Impact on Indonesia’s Investment Climate,” August 27.
- [36] North, D. C. (1990). *Institutions, institutional change and economic performance*. Cambridge: Cambridge University Press.
- [37] OECD. (2021). *OECD investment policy reviews and the rule of law: Contract enforcement*. Paris: OECD Publishing.
- [38] Prakoso, B. M., et al. (2024). Implementation of artificial intelligence in the drafting of legislation in Indonesia. *Depositi: Jurnal Publikasi Ilmu Hukum*, 2(1).
- [39] Rabinovich-Einy, O., & Katsh, E. (2017). Digital justice: Reshaping boundaries in online dispute resolution. *International Journal of Online Dispute Resolution*, 4(1), 5–35.
- [40] Rahayu, I. (2021). *Regulatory harmonization of judgment enforcement in civil procedure law*. Bandung: Refika Aditama.
- [41] Raz, J. (1977). The rule of law and its virtue. *The Law Quarterly Review*, 93, 195–211.
- [42] Reiling, D. (2019). *Technology for justice: How information technology can support judicial reform*. Leiden: Leiden University Press.
- [43] Reiling, D. (2021). Courts and artificial intelligence. *International Journal for Court Administration*, 12(2), 1–12.
- [44] Remus, D., & Levy, F. (2016). Can robots be lawyers? *Georgetown Journal of Legal Ethics*, 30(3), 501–558.
- [45] Salmeron-Manzano, E. (2021). Legaltech and lawtech: Global perspectives, challenges, and opportunities. *Laws*, 10(2).
- [46] Santoso, A. (2022). *HIR–RBg and the challenges of modern enforcement*. Jakarta: Prenadamedia.
- [47] SEMA No. 3 of 2018 concerning Best Practices for Handling Civil Cases (non-executable judgments & technical enforcement). (2018). Jakarta: Supreme Court of the Republic of Indonesia.
- [48] Setiawan, A. (2019). *Technical guidelines for civil enforcement and the need for structural reform*. Jakarta: Sinar Grafika.
- [49] Singapore Judiciary. (2021). *Integrated case management systems and online courts in Singapore*. Singapore: Supreme Court of Singapore.
- [50] SK Dirjen Badilum No. 1230/DJU/SK/HM.02.03/4/2021 on the Implementation of the PERKUSI Application.
- [51] SK Dirjen Badilum No. 1712/DJU/SK.T12.1/VIII/2023 on the Management of the SATU JARI Application.
- [52] Soepratignja, I. (2018). *Modernization of civil procedure law and judgment enforcement*. Surabaya: Airlangga University Press.

- [53] Sourdin, T. (2018). Judges, technology, and artificial intelligence. *Journal of Judicial Administration*, 27(4).
- [54] Subekti, R. (2001). *Indonesian civil procedure*. Jakarta: Bina Cipta.
- [55] Susskind, R. (2019). *Online courts and the future of justice*. Oxford: Oxford University Press.
- [56] Susskind, R. (2020). *Tomorrow's lawyers* (2nd ed.). Oxford: Oxford University Press.
- [57] Tyler, T. R. (2006). *Why people obey the law* (2nd ed.). Princeton, NJ: Princeton University Press.
- [58] Tyler, T. R. (2021). Trust in the judiciary in the digital age. *Judicature*, 105(1), 10–18.
- [59] UNCITRAL. (2017). *Technical notes on online dispute resolution*. New York: United Nations.
- [60] UNCTAD. (2022). *World investment report 2022*. Geneva: United Nations.
- [61] UNODC. (2021). *Digitalization of justice systems: Opportunities and risks*. Vienna: United Nations Office on Drugs and Crime.
- [62] Velicogna, M. (2017). Electronic access to justice: E-justice in Europe. *Information & Communications Technology Law*, 26(3), 217–234.
- [63] Venturini, J. (2020). Data-driven justice and performance metrics. *International Journal for Court Administration*, 11(2), 45–60.
- [64] Williamson, O. E. (1985). *The economic institutions of capitalism*. New York, NY: Free Press.
- [65] World Bank. (2020). *Doing Business: Enforcing contracts—Methodology and findings*. Washington, DC: The World Bank.
- [66] World Justice Project. (2023). *Rule of Law Index 2023*. Washington, DC: World Justice Project.