



Islamic Legal Technology and the Modernization of Marriage Registration Systems in Indonesian Muslim Communities

Sherina Suci Famelia¹, Abdullah²

¹ UIN Fatmawati Soekarno, Indonesia

² Universiti Malaya, Kuala Lumpur, Malaysia

Correspondence: sherinasf56@gmail.com

Article Info

Article history:

Received Jun 12th, 2025

Revised Aug 20th, 2025

Accepted Dec 26th, 2025

Keyword:

Islamic legal technology; marriage registration; digital governance; Indonesian Muslim communities; maqāṣid al-sharī'ah

ABSTRACT

The modernization of Islamic marriage registration through legal technology has become a critical phenomenon in the contemporary digital transformation of Indonesian Muslim communities. This shift reflects a broader trend where digital applications, electronic registration systems, and integrated administrative platforms are increasingly employed to facilitate marriage documentation and legal verification processes. The theoretical landscape surrounding this issue intersects Islamic family law, digital governance frameworks, and legal technology adoption within public administration systems. This study aims to analyze how legal technology reshapes Islamic marriage registration and influences legal accessibility, administrative effectiveness, and compliance with religious law requirements. Employing a normative and conceptual research approach, this study examines the relationship between Islamic law principles, digital governance mechanisms, and legal technology implementation in marriage administration. The findings reveal that digital systems have significantly improved service efficiency and legal integration across administrative bodies, yet they simultaneously generate challenges related to technological literacy, institutional adaptation, and the preservation of Islamic legal values. The study concludes that modernizing Islamic marriage registration requires balanced governance that harmonizes technological innovation, legal certainty, and Islamic ethical principles. Future policy recommendations emphasize developing digital literacy programs, establishing clear regulatory frameworks for technology adoption, and ensuring that digital transformation remains aligned with maqāṣid al-sharī'ah objectives.

ABSTRAK

Modernisasi pencatatan pernikahan Islam melalui teknologi hukum telah menjadi fenomena kritis dalam transformasi digital masyarakat Muslim Indonesia kontemporer. Pergeseran ini mencerminkan tren yang lebih luas di mana aplikasi digital, sistem pendaftaran elektronik, dan platform administrasi terintegrasi semakin digunakan untuk memfasilitasi dokumentasi pernikahan dan proses verifikasi hukum. Lanskap teoretis yang mengelilingi isu ini bersinggungan dengan hukum keluarga Islam, kerangka tata kelola digital, dan adopsi teknologi hukum dalam sistem administrasi publik. Penelitian ini bertujuan menganalisis bagaimana teknologi hukum membentuk ulang pencatatan pernikahan Islam dan memengaruhi aksesibilitas hukum, efektivitas administrasi, serta kepatuhan terhadap persyaratan hukum agama. Dengan menggunakan pendekatan penelitian normatif dan konseptual, studi ini mengkaji hubungan antara prinsip-prinsip hukum Islam, mekanisme tata kelola digital, dan implementasi teknologi hukum dalam administrasi pernikahan. Temuan menunjukkan bahwa sistem digital telah secara signifikan meningkatkan efisiensi layanan dan integrasi hukum lintas badan administratif, namun secara bersamaan menimbulkan tantangan terkait literasi teknologi, adaptasi kelembagaan, dan pelestarian nilai-nilai hukum Islam. Penelitian menyimpulkan bahwa modernisasi pencatatan pernikahan Islam memerlukan tata kelola yang seimbang antara inovasi teknologi, kepastian hukum, dan prinsip etika Islam. Rekomendasi kebijakan menekankan pengembangan program literasi digital, pembentukan kerangka regulasi yang jelas untuk adopsi teknologi, dan memastikan transformasi digital tetap selaras dengan tujuan maqāṣid al-sharī'ah.



1. INTRODUCTION

The intersection of digital technology and Islamic family law administration represents one of the most significant transformations in contemporary Muslim governance. Indonesia, home to the world's largest Muslim population, stands at the forefront of this transformation as it navigates the integration of legal technology into traditional marriage registration processes. The Marriage Management Information System (SIMKAH) and electronic court systems (e-Court) have emerged as primary instruments in this modernization effort, fundamentally altering how Muslim couples interact with state religious institutions (Jannah & Sukiati, 2025). This technological shift reflects broader global trends in e-governance while simultaneously raising questions about the compatibility between digital innovation and Islamic legal principles.

The urgency of examining this phenomenon stems from the persistent challenges facing marriage registration in Indonesia. Unregistered marriages remain prevalent, particularly in rural communities, leading to significant legal vulnerabilities for women and children regarding inheritance rights, child custody, and access to social services (Nurhayati et al., 2025). Research indicates that the complexity of marriage registration bureaucracy has created conditions where couples often delegate administrative processes to informal brokers, highlighting systemic inefficiencies that digital systems aim to address (Umairoh et al., 2020). The transformation toward electronic administration therefore carries implications beyond mere convenience, touching upon fundamental questions of legal protection and social justice.

The global literature on legal technology in family law administration reveals a growing recognition that digital transformation can enhance access to justice while simultaneously introducing new complexities. Studies across Muslim-majority jurisdictions demonstrate that digitalization has increased accessibility of legal information and simplified procedures, yet has also introduced tensions with traditional values and religious norms (Kurniawan et al., 2024). The digital transformation of public services has become an urgent necessity, including in civil administration, with significant implications for how family data is managed, stored, and protected (Sutrisni et al., 2024). However, research specifically addressing the Indonesian context of Islamic marriage registration remains limited, creating a notable gap in understanding how local institutional cultures and religious requirements shape technology adoption outcomes.

At the national level, Indonesian scholars have documented the evolving relationship between Islamic family law and digital governance. The Compilation of Islamic Law (KHI) increasingly functions as a dynamic social construction adapting to technological developments, though challenges related to relevance, flexibility, and formal legal status persist (Doni et al., 2025). Studies examining the digitalization of religious courts reveal that while e-Court systems improve efficiency, significant barriers including limited infrastructure, lack of digital literacy, and ongoing technical support deficiencies continue to hinder optimal implementation (Yasmita et al., 2025). Furthermore, research on reform efforts at the Office of Religious Affairs (KUA) indicates that bottom-up innovations at individual offices have achieved greater success than top-down policy mandates, suggesting the importance of institutional context in technology adoption (Kharlie et al., 2021).

Against this background, the present study formulates the following research questions: First, how does legal technology reshape the operational processes and legal frameworks of Islamic marriage registration in Indonesia? Second, what factors facilitate or impede the effective integration of digital systems with Islamic family law principles? Third, what governance model can balance technological innovation with religious law compliance and legal certainty? These questions address the critical need for empirical and conceptual understanding of digital transformation within Islamic legal institutions.

The theoretical relevance of this study lies in its integration of multiple analytical frameworks. From the perspective of Islamic jurisprudence, the research engages with *maqāsid al-sharī'ah* (objectives of Islamic law) as an evaluative criterion for assessing whether digital innovations serve the broader purposes of justice, welfare, and protection of essential values (Wafiroh & Yusuf, 2026). The principles of *ḥifz al-nasl* (protection of lineage), *ḥifz al-māl* (protection of property), and *'adl* (justice) provide normative foundations for evaluating digital marriage registration systems (Ipansyah & Hafidzi, 2025). Simultaneously, the research draws upon responsive law theory and *siyāsah idāriyyah* (administrative governance in Islamic law) to examine how judicial and administrative digitalization can maintain religious legitimacy while adapting to contemporary needs (Ilhamuna, 2025).

This research aims to achieve three primary objectives. First, it seeks to describe the current state of digital marriage registration implementation across Indonesian religious institutions. Second, it aims to critically analyze the factors determining successful or unsuccessful integration of legal technology with Islamic family law requirements. Third, it intends to propose a governance framework that ensures technological modernization remains aligned with both positive law requirements and Islamic ethical principles.

The contribution of this study extends across theoretical, practical, and policy dimensions. Theoretically, it advances understanding of how classical Islamic legal reasoning can accommodate digital innovations while preserving normative foundations. The integration of *maqāsid al-sharī'ah* with digital governance theory offers a conceptual model applicable beyond Indonesia to other Muslim-majority contexts navigating similar transformations. Practically, the findings provide guidance for religious court administrators, KUA officials, and legal practitioners seeking to optimize digital system utilization. At the policy level, the study offers recommendations for regulatory harmonization between existing civil procedure rules and emerging electronic administration regulations, addressing a significant gap in Indonesia's legal framework for digital judicial services.

2. LITERATUR REVIEW

2.1 General Research Trends

The academic literature examining digital transformation in Islamic family law has expanded significantly over the past five years, reflecting growing scholarly interest in the intersection of religious governance and technological innovation. Research trends can be broadly categorized into three interconnected domains: factors influencing technology adoption, processes of digital implementation, and impacts on legal outcomes and social welfare. The digital era has had a significant impact on marriage and divorce regulations within the framework of Islamic family law in Indonesia, with transformation affecting accessibility of legal information, simplification of procedures, and changing social dynamics in marriage and divorce administration (Kurniawan et al., 2024).

Contemporary scholarship increasingly recognizes that Islamic family law must adapt to modern challenges without losing core values, requiring approaches that combine flexibility of legal principles with contextualized reinterpretation of social changes (Nafi et al., 2024). This recognition has generated substantial literature examining how digital platforms, electronic courts, and automated administrative systems interact with traditional jurisprudential frameworks. Studies demonstrate that technological advancement has generated tensions between established legal norms and evolving social realities, with adaptive responses emerging through judicial *ijtihad* particularly in addressing issues such as digital evidence in family law cases (Nurafni et al., 2026).

2.2 Factors Influencing Digital Adoption in Islamic Family Law

Research on factors determining technology adoption in Islamic legal institutions identifies multiple intersecting variables. Infrastructure limitations represent a primary constraint, with studies across Indonesian religious courts documenting inadequate technology resources, network instability, and insufficient equipment as persistent barriers (Asyiqin et al., 2025). The implementation of e-Court

systems at religious courts, while improving administrative efficiency, continues to face obstacles including discrepancies in data, technical issues such as network disruptions, and challenges related to document verification (Jannah & Sukiati, 2025).

Human capital factors equally influence adoption outcomes. Digital literacy gaps among both court personnel and justice seekers significantly affect utilization rates, with evidence indicating that rural populations and elderly individuals face particular difficulties navigating electronic systems (Rofiq et al., 2025). Research examining e-Court implementation reveals that village communities seeking justice tend to prefer conventional registration over electronic alternatives, reflecting deeply embedded legal cultural preferences (Latifiani et al., 2022). The role of religious authority further shapes adoption, with studies documenting how the influence of local religious leaders (kiai) affects community willingness to engage with state registration systems (Baihaqi et al., 2024).

Institutional factors including organizational culture, leadership commitment, and coordination mechanisms also determine implementation success. Studies of individual religious affairs offices demonstrate that strong leadership and local innovation have proven more effective than centralized policy mandates in achieving meaningful digital transformation (Kharlie et al., 2021). However, these bottom-up approaches face limitations as they tend to be unsystematically applied across different jurisdictions, creating inconsistencies in service quality and legal outcomes.

2.3 Processes of Digital Implementation

The literature examining implementation processes reveals a staged progression from manual to electronic administration in Indonesian religious courts and offices. The Supreme Court's introduction of e-Court through Regulation Number 1 of 2019, subsequently amended by Regulation Number 7 of 2022, established the regulatory foundation for electronic case administration and trials (Suparno & Hidayatullah, 2024). This system encompasses four primary features: e-filing for case registration, e-payment for litigation fees, e-summons for electronic notifications, and e-litigation for online hearings (Surya et al., 2025).

Research evaluating SIMKAH implementation at local religious affairs offices documents both achievements and persistent challenges. The system has successfully standardized and digitized marriage registration, yet practical problems including data discrepancies between bride and groom information, falsification of documents, and canceled registrations due to family conflicts continue to emerge (Jannah & Sukiati, 2025). Studies indicate that processing time has been significantly reduced through digitalization, with some administrative services decreasing from thirty minutes to under ten minutes per transaction (Syafitri et al., 2025).

The digital transformation extends beyond registration to include electronic mediation (e-mediation) as a dispute resolution mechanism. Research examining electronic mediation implementation finds that while it expands access to justice and offers efficient dispute resolution, challenges related to digital infrastructure, technology literacy, and suboptimal management persist (Amalia & Shadiq, 2025). From an Islamic law perspective, electronic mediation gains legitimacy through alignment with maqāṣid al-sharī'ah principles, particularly justice, protection of property, and public interest (Hamzah et al., 2026).

2.4 Impacts on Legal Outcomes and Social Welfare

Studies examining the impact of digital transformation on legal outcomes reveal both positive developments and concerning gaps. Electronic court systems have positively contributed to realizing principles of speed, simplicity, and low cost in judicial proceedings, with evidence showing accelerated case administration, improved communication between parties, and enhanced transparency (Ariyanti & Wiraguna, 2025). The digitalization of divorce certificate issuance represents a strategic innovation aligning with mandates for simple, fast, and low-cost judiciary, potentially reducing bureaucratic complexity and document misuse risks (Ana et al., 2026).

However, research also documents differential impacts across population groups. Urban courts demonstrate more successful digital integration compared to rural jurisdictions, where infrastructure limitations and digital literacy gaps create hybrid practices and procedural inconsistencies (Asyiqin et al., 2025). This disparity raises concerns about equitable access to justice, as communities lacking digital resources may face heightened barriers to legal services. Studies emphasize that the shift to digital platforms raises serious concerns regarding data privacy and security, as handling of sensitive personal information becomes more vulnerable to breaches (Kurniawan et al., 2024).

The impact on religious law compliance presents a more complex picture. While digital systems can enhance documentation and verification of marriage requirements, scholars debate whether technological mediation affects the spiritual and ceremonial dimensions of Islamic marriage proceedings (Suryantoro, 2026). Research on online marriage contracts concludes they can be deemed valid if fulfilling pillars and conditions of marriage, with reinterpretation of the concept of *ittihād al-majlis* (unity of assembly) allowing Islamic law to adapt to technological advancements without compromising *sharī'ah* objectives (Khotimah et al., 2023).

2.5 Critical Evaluation of Previous Studies and Novelty Formulation

Critical assessment of existing research reveals several limitations requiring attention. First, most studies employ either purely doctrinal or narrowly empirical approaches, with limited integration of normative Islamic legal analysis with socio-legal examination of implementation realities. This methodological gap produces scholarship that either remains abstractly theoretical or descriptively empirical without engaging the evaluative frameworks embedded in Islamic jurisprudence. Second, comparative dimensions remain underdeveloped, with insufficient analysis of how Indonesia's experience relates to digital transformation in other Muslim-majority jurisdictions such as Malaysia, Morocco, or the Gulf states.

Third, existing literature tends to focus on either court systems or registration offices in isolation, without adequately examining the interconnections and data integration challenges between these institutions. The relationship between SIMKAH systems at religious affairs offices and e-Court platforms at religious courts represents a critical but understudied dimension of digital transformation. Fourth, research on user experiences remains limited, with most studies drawing primarily on official documentation and administrator perspectives rather than systematically incorporating the voices of couples, families, and community members navigating these systems.

This study addresses identified gaps through an integrative analytical framework combining normative Islamic legal analysis with conceptual examination of digital governance. The novelty lies in several dimensions. First, it explicitly operationalizes *maqāsid al-sharī'ah* as an evaluative criterion for assessing digital marriage registration, moving beyond general invocations of Islamic principles toward specified indicators of compliance with *sharī'ah* objectives. Second, it examines the governance relationship between multiple institutions involved in marriage administration, including religious affairs offices, religious courts, and civil registration agencies.

Third, this research proposes a balanced governance model that synthesizes technological innovation requirements with Islamic ethical principles and positive law certainty. This model responds to the persistent challenge identified across the literature: how to achieve modernization that serves contemporary needs while maintaining religious legitimacy and legal integrity. The research direction therefore contributes both to theoretical advancement in Islamic legal studies and to practical guidance for policymakers and administrators navigating digital transformation.

3. METHODS

3.1 Research Design

This study employs a normative-juridical research design with conceptual analysis, selected for its capacity to examine the relationship between legal norms, institutional practices, and theoretical frameworks governing digital transformation in Islamic marriage registration. The normative approach enables systematic analysis of statutory provisions, regulations, and jurisprudential principles relevant to marriage administration and digital governance. The conceptual dimension facilitates integration of Islamic legal theory, particularly *maqāṣid al-sharī'ah*, with contemporary governance frameworks.

The research design aligns with established methodological approaches in Islamic legal scholarship, which emphasize the integration of textual analysis with contextual examination of legal application. This approach has been validated in comparable studies examining Islamic family law reform through Supreme Court circulars, demonstrating its utility for analyzing the intersection of formal legal rules with evolving social and technological contexts (Arrasyid et al., 2024). The design further incorporates elements of comparative analysis, drawing upon experiences from other Muslim-majority jurisdictions to contextualize Indonesian developments within broader regional and global trends.

3.2 Unit of Analysis

The unit of analysis encompasses the regulatory framework, institutional arrangements, and operational practices governing Islamic marriage registration in Indonesia. This includes analysis at three interconnected levels: (1) national-level regulations including Marriage Law No. 1 of 1974, the Compilation of Islamic Law, Supreme Court regulations on electronic administration, and Ministry of Religious Affairs directives; (2) institutional-level policies and practices at religious affairs offices and religious courts; and (3) conceptual frameworks including Islamic jurisprudential principles, digital governance theory, and legal technology scholarship.

The multi-level approach recognizes that digital transformation operates simultaneously across regulatory, institutional, and conceptual dimensions, with developments at each level influencing outcomes at others. This comprehensive unit of analysis enables identification of harmonization requirements and potential conflicts between different governance layers.

3.3 Data Sources

The research draws upon primary and secondary data sources organized according to their function in the analysis.

Table 1: Data Sources Classification

Category	Type	Sources
Primary Legal Materials	Statutory Law	Law No. 1 of 1974 on Marriage; Law No. 48 of 2009 on Judicial Power; Law No. 27 of 2022 on Personal Data Protection
Primary Legal Materials	Regulations	PERMA No. 1 of 2019; PERMA No. 7 of 2022; KMA No. 829 of 2019; DJ.II/369 of 2013
Primary Legal Materials	Islamic Law Sources	Compilation of Islamic Law (KHI); Classical fiqh texts; MUI fatwas

Category	Type	Sources
Secondary Materials	Academic Literature	Peer-reviewed journals (2020-2025); Books on Islamic family law and digital governance
Secondary Materials	Institutional Documents	Supreme Court reports; Ministry of Religious Affairs publications; Court decisions
Tertiary Materials	Reference Works	Legal dictionaries; Encyclopedia of Islamic jurisprudence

Source: Author's compilation

3.4 Data Collection Techniques

Data collection proceeded through systematic literature review and documentary analysis. The literature review employed academic databases including Scopus, Web of Science, Google Scholar, and specialized Islamic studies repositories to identify relevant scholarship published between 2020 and 2025. Search terms combined keywords related to Islamic family law, digital transformation, marriage registration, e-Court, and Indonesian Muslim communities in both English and Indonesian languages.

Documentary analysis examined primary legal materials including statutory texts, regulations, and official directives governing marriage registration and electronic administration. This analysis identified the formal legal requirements for digital systems, procedural rules for electronic transactions, and regulatory gaps requiring attention. The analysis further examined institutional reports and publications documenting implementation experiences, challenges, and innovations at religious courts and affairs offices.

3.5 Data Analysis Techniques

Data analysis employed qualitative legal analysis combining three approaches. First, statutory interpretation examined the meaning, scope, and application of legal provisions governing marriage registration and digital administration. This interpretation utilized established canons of legal construction including textual analysis, systematic interpretation within the broader legal framework, and teleological interpretation focused on legislative purposes.

Second, conceptual analysis examined the relationship between Islamic jurisprudential principles and digital governance requirements. This analysis operationalized *maqāsid al-sharī'ah* through specified indicators: protection of religion (*ḥifẓ al-dīn*), life (*ḥifẓ al-nafs*), lineage (*ḥifẓ al-nasl*), intellect (*ḥifẓ al-'aql*), and property (*ḥifẓ al-māl*), assessing how digital systems serve or potentially compromise these objectives.

Third, comparative analysis examined Indonesian developments in relation to experiences from other jurisdictions, identifying transferable lessons and context-specific considerations. The analysis integrated findings from studies of digital transformation in Malaysian, Moroccan, and other Muslim-majority legal systems to contextualize Indonesian approaches within broader regional patterns.

The analytical process followed iterative stages of data reduction, thematic organization, and theoretical interpretation. Initial analysis identified recurring themes across sources, which were subsequently organized into analytical categories corresponding to the research questions. Final interpretation synthesized findings into a coherent framework addressing the relationship between legal technology, Islamic law principles, and marriage registration modernization.

4. RESULTS

4.1 Digital Marriage Registration: Descriptive Analysis of Current Practice

The implementation of digital marriage registration in Indonesia represents a significant transformation in how the state facilitates and documents Islamic marriages. The Marriage Management Information System (SIMKAH), mandated through directives from the Director General of Islamic Community Guidance, has been progressively implemented across religious affairs offices nationwide. This system standardizes registration procedures, creates centralized databases, and enables data sharing between KUA offices, religious courts, and civil registration agencies (Jannah & Sukiati, 2025).

Analysis of regulatory provisions reveals that SIMKAH operates within a multi-layered governance framework. At the statutory level, Law No. 1 of 1974 on Marriage establishes the fundamental requirement that marriages must be registered to obtain state recognition. The Compilation of Islamic Law specifies procedural requirements including documentation of witnesses, guardians, and dowry that must be captured within digital registration systems. Supreme Court regulations govern the interface between registration data and subsequent court proceedings, establishing standards for electronic evidence and administrative validity.

The operational architecture of digital marriage registration encompasses several interconnected components. Pre-registration services enable prospective couples to submit initial documentation online, reducing physical visits to KUA offices. The registration process itself captures comprehensive data including identity verification, guardian authorization, witness attestation, and dowry specification. Post-registration services generate digital marriage certificates and transmit data to civil registration authorities for population database integration. Research examining this implementation indicates that while standardization has been achieved, challenges persist including discrepancies in data between parties, technical network disruptions, and falsification attempts requiring stricter verification protocols (Jannah & Sukiati, 2025).

The integration between SIMKAH at religious affairs offices and e-Court systems at religious courts represents a critical dimension of digital transformation. Cases involving marriage validation (*isbat nikah*), divorce proceedings, and marriage-related disputes rely upon data initially captured through registration systems. Studies document that electronic court administration through e-Court has positively contributed to realizing principles of speed, simplicity, and low cost, with features including e-filing, e-payment, e-summons, and e-litigation enabling comprehensive digital case management (Surya et al., 2025). However, the rate of e-Litigation adoption remains lower than e-Court registration, with empirical data from Central Java religious courts indicating that despite increasing e-Court registration, electronic trial utilization has not proportionally increased (Rofiq et al., 2025).

4.2 Critical Factors Influencing Integration Success

Critical analysis identifies multiple factors determining the effectiveness of digital marriage registration integration with Islamic family law requirements. These factors operate across technological, institutional, social, and normative dimensions.

Technological Infrastructure: The availability and reliability of digital infrastructure fundamentally constrains implementation outcomes. Research across Indonesian religious courts documents that limited information technology infrastructure, technical constraints, and network instability represent significant obstacles (Yasmita et al., 2025). Urban jurisdictions consistently demonstrate higher utilization rates and more successful integration compared to rural areas where connectivity remains unreliable. This geographic disparity creates a digital divide that potentially exacerbates existing inequalities in access to legal services.

Institutional Capacity: Organizational readiness encompasses both human resource competencies and administrative culture. Studies reveal that low digital literacy among both court

personnel and justice seekers significantly affects system utilization (Akhmas & Latifiani, 2026). Traditional legal culture, characterized by preference for face-to-face proceedings and conventional documentation, creates resistance to electronic alternatives. However, institutions demonstrating strong leadership commitment and innovative adaptation achieve better outcomes, suggesting that organizational factors mediate the relationship between technology availability and effective utilization (Kharlie et al., 2021).

Regulatory Coherence: The alignment between digital system requirements and existing procedural law provisions presents ongoing challenges. Current civil procedural rules were designed for conventional paper-based proceedings, creating normative gaps when applied to electronic contexts. Research examining e-Court implementation identifies debates regarding legal principles governing electronic procedures, particularly concerning validity of electronic signatures, authentication requirements, and evidentiary standards (Suparno & Hidayatullah, 2024). The digital transformation of divorce certificate issuance, for example, requires harmonization with personal data protection law to ensure sensitive information is adequately safeguarded (Ana et al., 2026).

The compatibility between digital processes and Islamic legal requirements represents a distinctive dimension of analysis for Muslim-majority contexts. Classical jurisprudence specifies conditions for valid marriage including the requirement of *ittihād al-majlis* (unity of assembly) for offer and acceptance. Contemporary scholarship has reinterpreted this concept to accommodate digital communication, concluding that online marriage contracts can be valid if fulfilling pillars and conditions of marriage through real-time digital interaction (Khotimah et al., 2023). However, concerns persist regarding whether technological mediation affects the spiritual and ceremonial dimensions that distinguish Islamic marriage as a form of worship (*‘ibādah*) as well as a civil contract (*mu‘āmalah*).

4.3 Transformative Implications and Governance Model

The analysis reveals that successful modernization of Islamic marriage registration requires a governance model balancing three core objectives: technological effectiveness, legal certainty, and religious law compliance. This model must address the identified challenges while leveraging opportunities presented by digital transformation.



Figure 1: Conceptual Framework for Islamic Legal Technology Integration in Marriage Registration (Source: Author's Development).

The research (figure 1) proposes an integrative governance model structured around three interconnected principles. First, adaptive regulation ensures that legal frameworks remain responsive to technological developments while maintaining procedural integrity. This requires ongoing regulatory review, establishment of digital-specific provisions within procedural rules, and mechanisms for addressing emerging challenges such as data security and algorithmic accountability.

Second, capacity-building ecosystems address human capital requirements through systematic programs developing digital literacy among court personnel, religious affairs officers, legal practitioners, and the general public. These programs must be differentiated according to user needs, with particular attention to populations facing digital access barriers including rural communities, elderly individuals, and economically disadvantaged groups.

Third, maqāṣid-based evaluation provides a normative framework ensuring digital transformation serves broader Islamic legal objectives. This involves assessing whether digital systems adequately protect lineage through proper documentation of marriage validity, preserve property rights through accurate recording of dowry and marital assets, and promote justice through equitable access to legal services. The integration of maqāṣid al-sharī'ah with digital governance theory offers a distinctive contribution, positioning Islamic ethical principles as evaluative criteria for technological innovation rather than obstacles to modernization (Al-Turabi & Auda, 2025).

The proposed model further emphasizes institutional coordination mechanisms ensuring data integrity across the multiple agencies involved in marriage administration. Current fragmentation between religious affairs offices, religious courts, and civil registration agencies creates inefficiencies and potential inconsistencies in documentation. Integrated data governance protocols, standardized verification procedures, and interoperable systems can address these coordination challenges while enhancing overall system reliability.

5. DISCUSSION

This study has examined the intersection of legal technology and Islamic marriage registration modernization in Indonesian Muslim communities, generating findings across three dimensions. First, descriptive analysis reveals that digital systems including SIMKAH and e-Court have been progressively implemented across religious institutions, achieving standardization of procedures and improved administrative efficiency. However, implementation remains uneven, with urban jurisdictions demonstrating significantly higher utilization and integration success than rural areas.

Second, critical analysis identifies multiple factors determining integration outcomes, including technological infrastructure availability, institutional capacity and organizational culture, regulatory coherence between digital requirements and existing procedural law, and compatibility with Islamic legal principles. The interaction among these factors creates varied implementation experiences across different jurisdictions and institutions.

Third, transformative analysis proposes a governance model integrating adaptive regulation, capacity-building ecosystems, and maqāṣid-based evaluation to ensure digital transformation serves both modernization objectives and religious law compliance. This model addresses the persistent tension between technological innovation and normative preservation that characterizes digital transformation in religious legal systems.

The findings must be situated within Indonesia's distinctive context as the world's largest Muslim-majority nation undergoing rapid digital development. The government's broader e-governance initiatives, including digital population administration and electronic public services, provide the institutional environment within which religious affairs digitalization occurs. The efficiency gains documented in population administration services, where processing times have been reduced from

thirty minutes to under ten minutes through digital identity systems, demonstrate the potential for similar improvements in marriage registration (Syafitri et al., 2025).

Simultaneously, Indonesia's religious institutional landscape shapes implementation possibilities and constraints. The decentralized structure of religious affairs offices, operating under Ministry of Religious Affairs supervision but with significant local variation, creates conditions where bottom-up innovations can flourish but systematic nationwide implementation faces coordination challenges. The relationship between state religious administration and community-based religious authority, including the influential role of local religious leaders, further affects how populations engage with formal registration systems.

5.1 Theoretical Interpretation

The findings support and extend theoretical frameworks examining digital transformation in legal systems. Responsive law theory, which emphasizes legal institutions' capacity to adapt to changing social circumstances while maintaining legitimacy, provides a useful lens for understanding religious court digitalization. Research confirms that digitalizing religious court administration through e-courts represents a strategic step toward building an adaptive and responsive legal system, reflecting principles of responsive law while expanding access to justice (Ilhamuna, 2025).

From the perspective of Islamic legal theory, the findings demonstrate that *maqāsid al-sharī'ah* can function as an evaluative framework for assessing technological innovations. Rather than viewing digital transformation as inherently compatible or incompatible with Islamic principles, *maqāsid* analysis enables nuanced assessment of how specific implementations serve or compromise essential objectives. The framework of *maqāsid al-sharī'ah*, emphasizing justice, welfare, and human dignity, provides robust normative foundations for evaluating digital governance (Al-Turabi & Auda, 2025). This approach aligns with contemporary *ijtihad* methodology that combines textual fidelity with contextual responsiveness.

Understanding implementation dynamics requires attention to the social construction of technology adoption within religious communities. The persistence of unregistered marriages despite available registration mechanisms indicates that technological solutions alone cannot address deeply embedded social and economic factors influencing marriage practices. Studies document that unregistered marriages continue in communities where religious authority confers legitimacy independent of state registration, challenging assumptions that digital accessibility will automatically increase compliance (Baihaqi et al., 2024).

The role of intermediaries in navigating bureaucratic systems presents another dimension requiring attention. Research documents that marriage administration brokers function as informal social institutions mediating relations between Muslim communities and the state, reflecting persistent gaps between formal system designs and actual user capabilities (Umairoh et al., 2020). Digital transformation may reduce reliance on such intermediaries but only to the extent that systems are genuinely accessible to populations with varying levels of technological literacy and infrastructure access.

5.2 Comparison with Previous Studies

The findings confirm previous research identifying infrastructure limitations, digital literacy gaps, and institutional adaptation challenges as persistent barriers to e-Court implementation across Indonesian religious courts (Yasmita et al., 2025). The documented disparity between e-Court registration rates and e-Litigation utilization aligns with studies from Central Java documenting that despite increasing electronic registration, trial proceedings remain predominantly conventional (Akhmas & Latifiani, 2026).

However, this study extends previous research by systematically integrating Islamic legal analysis with digital governance examination. While existing scholarship tends to treat religious law

compliance as a background consideration, this analysis operationalizes *maqāṣid al-sharī'ah* as an explicit evaluative criterion. This approach responds to calls within Islamic legal scholarship for contextual *ijtihad* that addresses contemporary challenges while remaining grounded in normative principles (Ipansyah & Hafidzi, 2025).

The comparative dimension reveals both convergences and divergences with experiences in other Muslim-majority jurisdictions. Malaysia's experience with digital *waqf* governance and standardization of Islamic family law administration provides relevant comparative insights, particularly regarding the challenges of harmonizing state autonomy with national consistency (Rahim & Omar, 2025). Morocco's constitutional embedding of *maqāṣid* principles and Tunisia's post-revolution legal reforms offer additional comparative reference points for understanding how Islamic legal systems can accommodate institutional innovation while maintaining religious legitimacy (Al-Turabi & Auda, 2025).

6. CONCLUSION

This study demonstrates that legal technology has fundamentally transformed Islamic marriage registration systems in Indonesian Muslim communities through the integration of digital governance, SIMKAH services, and electronic judicial administration. Digital transformation has improved administrative efficiency, accelerated registration processes, strengthened documentation accuracy, and expanded public access to Islamic legal services. At the same time, the research identifies persistent structural challenges, including digital inequality in rural areas, limited technological literacy, regulatory inconsistencies, and ongoing debates regarding the compatibility of digital procedures with Islamic legal requirements. These findings confirm that modernization of Islamic marriage administration requires not only technological innovation but also strong legal, institutional, and religious governance frameworks.

The study contributes theoretically by integrating *maqāṣid al-sharī'ah*, digital governance theory, and Islamic administrative law into a unified analytical framework for evaluating legal technology in religious administration. The research demonstrates that Islamic legal principles can function as normative foundations for technological modernization rather than barriers to digital transformation. By applying *maqāṣid*-based evaluation to digital governance systems, the study expands contemporary Islamic legal scholarship beyond doctrinal analysis into institutional and administrative governance. Methodologically, the combination of normative legal analysis and governance-based conceptual approaches provides a comprehensive understanding of how digital systems interact with Islamic legal institutions and public administration practices.

The study further emphasizes the importance of responsive and inclusive governance in the modernization of Islamic marriage registration. Policymakers, KUA administrators, religious courts, and legal practitioners must strengthen digital infrastructure, harmonize regulations, improve digital literacy, and ensure data protection and institutional accountability. Future technological developments, including artificial intelligence and advanced digital verification systems, will continue to reshape Islamic legal administration and require ongoing scholarly and regulatory attention. Ultimately, the research argues that sustainable modernization of Islamic marriage registration depends on balancing technological progress with Islamic legal values, public welfare, and institutional legitimacy in the digital era.

7. CRediT Author Statement

Sherina Suci Famelia: Conceptualization, Methodology, Formal Analysis, Investigation, Data Curation, Writing – Original Draft, Visualization. **Abdullah:** Conceptualization, Validation, Resources, Writing – Review & Editing, Supervision, Project Administration. All authors have read and approved the final version of the manuscript. The authors agree to be accountable for all aspects of the work and have reviewed and approved the submitted version of the manuscript.

8. REFERENCES

- Akhmas, M. Q. A., & Latifiani, D. (2026). Registration data discrepancy e-court with implementation trial e-litigation at the pemalang religious court. *Law Research Review Quarterly*. <https://doi.org/10.15294/lrrq.v12i1.45031>
- Al-Turabi, U. M., & Auda, J. (2025). Toward a maqāṣid-based legal reform: Systemic thinking for social transformation in the modern muslim world. *Indonesian Journal of Islamic Law*. <https://doi.org/10.35719/fhw10v84>
- Amalia, A. N., & Shadiq, A. N. (2025). Electronic mediation as the implementation of access to justice and judicial administration reform in indonesia. *International Journal of Multidisciplinary Research and Analysis*. <https://doi.org/10.47191/ijmra/v8-i11-64>
- Ana, A., Anisah, I., & Putra, Y. B. T. (2026). Transformasi digital akta cerai DIGITAL TRANSFORMATION OF DIVORCE CERTIFICATES AND REFORM OF RELIGIOUS COURT PROCEDURE IN INDONESIA. *Indonesian Journal of Shariah and Justice*. <https://doi.org/10.46339/ijjs.v5i2.201>
- Ariyanti, D. E., & Wiraguna, S. A. (2025). Asas cepat, sederhana, dan biaya ringan dalam praktik e-court: Analisis efektivitas implementasi digitalisasi sistem peradilan di indonesia. *Amandemen: Jurnal Ilmu Pertahanan, Politik Dan Hukum Indonesia*. <https://doi.org/10.62383/amandemen.v2i4.1369>
- Arrasyid, F., Pagar, P., & Tanjung, D. (2024). Islamic family law reform in indonesia through supreme court circulars: A maqasid sharia perspective. *Ulul Albab: Jurnal Studi Dan Penelitian Hukum Islam*. <https://doi.org/10.30659/jua.v6i2.29236>
- Asyiqin, I. Z., Fitriyanti, F., Susila, M., Akbar, M. F., & Wirayudha, D. P. (2025). Transforming sharia economic dispute resolution through e-court for simple, fast, and affordable justice. *Prophetic Law Review*. <https://doi.org/10.20885/plr.vol7.iss2.art1>
- Baihaqi, B., Tutik, T., Musadad, A., Khazin, A., & Simun, M. G. bin. (2024). Legal non-compliance and kiai hegemony: The practice of unregistered marriages among the madurese muslim community of kubu raya. *Journal of Islamic Law*. <https://doi.org/10.24260/jil.v5i2.2819>
- Doni, M., Hanani, S., Di, A.-N., Mlati, K., Tinjauan, D., & Syariah, M. (2025). The compilation of islamic law as a socio-digital product in the reform of islamic law in indonesia. *Hakamain: Journal of Sharia and Law Studies*. <https://doi.org/10.57255/hakamain.v4i1.1335>
- Hamzah, Mohammed. N., Hariyanto, E., Zahid, M., Haryanto, R., & Masrufah, M. (2026). The transformation of electronic mediation: A legal innovation in the sharia economic dispute resolution. *JURIS (Jurnal Ilmiah Syariah)*. <https://doi.org/10.31958/juris.v25i1.15856>
- Ilhamuna, M. (2025). MODERNIZING ISLAMIC JUDICIAL ADMINISTRATION IN THE CONTEMPORARY ERA: AN ANALYSIS OF RESPONSIVE LAW AND SIYĀSAH IDĀRIYYAH. *Al-Mawarid Jurnal Syariah Dan Hukum (JSYH)*. <https://doi.org/10.20885/mawarid.vol7.iss1.art7>
- Ipansyah, N., & Hafidzi, A. (2025). REFORM OF ISLAMIC FAMILY LAW IN INDONESIA: INTEGRATING MAQĀṢID AL-SHARĪ'AH AND THE PRINCIPLES OF JUSTICE IN THE DIGITAL ERA. *AL-SYAKHSHIYYAH Jurnal Hukum Keluarga Islam Dan Kemanusiaan*. <https://doi.org/10.30863/as-hki.v7i2.10637>
- Jannah, F. H., & Sukiati. (2025). Digital transformation in marriage administration: Evaluating the implementation of SIMKAH at KUA medan barat. *Al-Risalah Jurnal Ilmu Syariah Dan Hukum*. <https://doi.org/10.24252/al-risalah.vi.55635>

- Kharlie, A. T., Fathudin, F., & Triana, W. (2021). Reforming islamic marriage bureaucracy in indonesia: Approaches and impacts. *Al-Jami Ah Journal of Islamic Studies*. <https://doi.org/https://doi.org/10.14421/ajis.2021.592.255-286>
- Khotimah, K., Afifah, L., Maisaroh, L., & Jaya, R. (2023). Legalitas akad nikah daring dalam perspektif fikih islam kontemporer: Reinterpretasi ittihad al-majlis di era digital. *Bulletin of Indonesian Islamic Studies*. <https://doi.org/10.51214/biis.v2i2.1434>
- Kurniawan, P., Ahmatnihar, A., & Ridwan, M. (2024). The transformation of islamic family law in the digital era: A sociological legal analysis of marriage and divorce regulations in indonesia. *Madania*. <https://doi.org/10.29300/madania.v28i2.5146>
- Latifiani, D., Yusriyadi, Y., Saron, A., Fikry, A. H. A., & Cholis, M. N. (2022). Reconstruction of e-court legal culture in civil law enforcement. *Journal of Indonesian Legal Studies*. <https://doi.org/https://doi.org/10.15294/jils.v7i2.59993>
- Nafi, K. F. N., Nisa, K., & Rohman, A. T. (2024). Digitalization in islamic family law: An opportunity or a threat? *International Journal of Religion and Social Community*. <https://doi.org/10.30762/ijoresco.v2i2.3498>
- Nurafni, Rajab, K., Arisman, & Asrianto, R. (2026). The impact of globalization and scientific and technological developments on family behavior and the dynamics of islamic family law. *Hayula: Indonesian Journal of Multidisciplinary Islamic Studies*. <https://doi.org/10.21009/hayula.010.01.07>
- Nurhayati, Datupalinge, S., Ridwan, A., Irfan, A., & fikri, M. (2025). ISBAT NIKAH SEBAGAI INSTRUMEN HUKUM PEMENUHAN HAK ISTRI DALAM PERKAWINAN. *Tahkim (Jurnal Peradaban Dan Hukum Islam)*. <https://doi.org/10.29313/tahkim.v8i2.8052>
- Rahim, H. A., & Omar, A. F. (2025). Reconsidering the concept of mastautin in malaysia: A siyāsah syar'iyah-based framework for islamic family law standardisation. *Jurnal Ilmiah Mizani Wacana Hukum Ekonomi Dan Keagamaan*. <https://doi.org/10.29300/mzn.v12i2.8749>
- Rofiq, N., Hadji, K., & Bily, M. Y. A. (2025). Transformasi digital di pengadilan agama. *The International Journal of Pegon Islam Nusantara Civilization*. <https://doi.org/10.51925/inc.v14i01.132>
- Suparno, U. A. K., & Hidayatullah. (2024). Implementation of the e-court system in resolving cases in the religious courts. *ICCCM Journal of Social Sciences and Humanities*. <https://doi.org/10.53797/icccmjssh.v3i2.9.2024>
- Surya, A., Sumarwoto, S., & Nugroho, A. S. (2025). IMPLEMENTASI e-COURT DALAM MENINGKATKAN EFISIENSI PROSES PERADILAN (STUDI KASUS PADA PENGADILAN AGAMA SRAGEN). *Juris Delict Journal*. <https://doi.org/10.52429/y55thh92>
- Suryantoro, D. (2026). ANALISIS INTERDISIPLINER TENTANG PERCERAIAN DIGITAL PERSPEKTIF HUKUM KELUARGA ISLAM, TEKNOLOGI INFORMASI, TRANSFORMASI SOSIAL DAN ANTROPOLOGI. *Tahkim (Jurnal Peradaban Dan Hukum Islam)*. <https://doi.org/10.29313/tahkim.v9i1.9493>
- Sutrisni, N. K., Sukma, P. A. P., Embong, R., & Haydarov, K. (2024). The compliance of governance on family data protection regulation. *Journal of Human Rights Culture and Legal System*. <https://doi.org/10.53955/jhcls.v4i3.293>
- Syafitri, I., Nurman, N., & Mardatillah, A. (2025). Efficiency of population administration services based on digital identity: An integrative analysis from the perspective of islamic values in riau province. *Administratio*. <https://doi.org/10.23960/administratio.v16i1.487>

Umairoh, P., Hakimah, N., Utsany, R., & Muala, A. (2020). Brokered marriage administration: Rational strategies of muslim communities in navigating the bureaucratization of marriage in indonesia. *Indonesian Journal of Sharia and Socio-Legal Studies*. <https://doi.org/10.24260/ijssls.1.2.132>

Wafiroh, N. H., & Yusuf, N. A. (2026). Contemporary fiqh as an evaluative framework for indonesian family law. *Southeast Asian Journal of Islamic Studies*. <https://doi.org/10.66127/835zfv15>

Yasmita, Y., Fathonih, Ah., Saepulah, U., Burhanuddin, B., Ridwan, M., & Saputra, E. (2025). The implementation of e-court at the banten high religious court: Challenges, barriers, and prospects within indonesia's legal system. *Al-Qadha*. <https://doi.org/10.32505/qadha.v12i2.11677>