

Digital Transformation of Civil Justice in Indonesia and Malaysia: A Comparative Study on the Effectiveness of E-Court Services

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Abstract

The digital transformation of judicial institutions has become an important strategy for improving the effectiveness, transparency, and accessibility of civil justice systems in various countries, including Indonesia and Malaysia. The implementation of electronic court (e-court) services represents a significant shift in judicial administration by integrating information technology into case registration, payment systems, document submission, and online hearings. This study aims to comparatively analyze the effectiveness of e-court services in Indonesia and Malaysia, with particular focus on the implementation of digital court systems at Purwokerto District Court and selected Malaysian courts. The research employs a comparative socio-legal approach using qualitative methods. Data are obtained through legal documents, regulations, institutional reports, and relevant literature concerning judicial digitalization in both countries. The study examines several indicators of effectiveness, including accessibility, efficiency, procedural transparency, service quality, and challenges in implementation. The findings indicate that although both countries have experienced substantial progress in judicial digitalization, differences remain in technological infrastructure, regulatory support, digital literacy, and institutional readiness. Indonesia demonstrates significant advancement through the expansion of e-court services, while Malaysia exhibits relatively stronger integration in certain aspects of judicial digital systems. The study concludes that effective digital transformation requires not only technological innovation but also adaptive legal frameworks and institutional capacity strengthening to ensure broader access to justice.



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INTRODUCTION

The rapid development of information and communication technology has transformed various dimensions of public services, including the administration of judicial institutions.¹

¹ Zumrotu Ruzayana et al., "Judicial System Digitalization: The Constitutionality of the E-Court System in Southeast Asia," *Hakamain: Journal of Sharia and Law Studies* 4, no. 1 (July 2025): 127–38, <https://doi.org/10.57255/hakamain.v4i1.1343>

Digital transformation has become an essential strategy in modern governance aimed at improving efficiency, transparency, and accessibility in delivering public services. Within the justice sector, the integration of digital technology has fundamentally altered traditional judicial processes by replacing conventional administrative procedures with technology-based systems. Such transformation is increasingly regarded as an important mechanism for strengthening judicial performance and ensuring broader access to justice in contemporary societies.²

The digitalization of judicial systems has emerged as a global phenomenon in response to increasing demands for efficient legal services. Judicial institutions worldwide have gradually implemented electronic platforms to facilitate case management, filing procedures, court administration, and virtual hearings. These developments are driven not only by technological progress but also by the necessity to reduce procedural complexity and administrative burdens within judicial systems.³ The transition toward electronic judicial mechanisms reflects a broader movement toward digital governance and institutional modernization.

In recent years, Indonesia has experienced significant developments in judicial digitalization through the introduction of electronic court services (e-court). The judiciary's implementation of e-court systems represents an effort to simplify legal procedures and increase accessibility for justice seekers. Through electronic platforms, judicial processes such as case registration, court fee payment, electronic summons, document submission, and virtual proceedings can be conducted more efficiently. These reforms are intended to support the realization of a judicial system that is transparent, accountable, and responsive to public needs.⁴

The implementation of e-court services in Indonesia gained stronger relevance amid increasing demands for institutional adaptation in the digital era. The emergence of technological innovation and the broader use of internet-based services have changed public expectations regarding legal service delivery. Furthermore, circumstances arising from global challenges, including public health crises and mobility restrictions, accelerated the need for digital mechanisms within judicial administration.⁵ Consequently, courts have been required to adopt flexible systems capable of maintaining legal processes while minimizing procedural barriers.

Similar developments can also be observed in Malaysia, where judicial institutions have progressively adopted digital initiatives to improve legal service delivery. Malaysian courts have implemented electronic filing systems and integrated digital mechanisms aimed at enhancing judicial efficiency and reducing procedural delays. The adoption of technology within Malaysian

² Indriati Amarini et al., "Digital Transformation: Creating an Effective and Efficient Court in Indonesia," *Legality: Jurnal Ilmiah Hukum* 31, no. 2 (September 2023): 266–84, <https://doi.org/10.22219/ljih.v31i2.28013>.

³ Azhar Alam et al., "Identifying Problems and Solutions of The E-Court System of Religious Courts in Indonesia: An Analytic Network Process Study," *UUM Journal of Legal Studies* 15, no. 2 (July 2024): 645–74, <https://doi.org/10.32890/uumjls2024.15.2.10.religious> e-Courts take more work to execute. This study has identified religious court e-Court implementation issues and solutions using Delphi and ANP. It first employed Delphi and a literature review to interview experts face-to-face. Eight judges, I.T. workers, and attorneys from three religious court districts analysed the model using a priority scale with an Analytic Network Process (ANP)

⁴ Taun, Imanudin Affandi, and Rahman, "Application of E-Court in Different Countries: A Comparative Study in the Development of E-Court," 2023, 1080–91, https://doi.org/10.2991/978-2-38476-164-7_100.

⁵ Aristo Evandy A Barlian et al., "The Digital Transformation of Criminal Justice: A Comparative Examination of Indonesia's E-Court System and Global Best Practices," *Lex Scientia Law Review* 9, no. 1 (2025): 1500–1534.

judicial institutions reflects governmental efforts to modernize public administration and strengthen institutional effectiveness. Various digital platforms have been developed to facilitate communication between courts, legal practitioners, and litigants within a more integrated legal framework.⁶

Despite sharing similar objectives in promoting efficient judicial administration, Indonesia and Malaysia demonstrate different institutional characteristics and approaches in implementing digital justice systems.⁷ Variations may exist in legal frameworks, technological infrastructure, administrative procedures, digital literacy, and institutional readiness. Such differences potentially influence the effectiveness of digital court services and shape the experiences of users interacting with judicial institutions. Therefore, understanding these variations becomes important for identifying strengths and challenges in each system.

The effectiveness of e-court services can be assessed through several dimensions, including procedural efficiency, accessibility, transparency, user satisfaction, and the quality of judicial services. Digital systems are expected to reduce administrative costs, shorten procedural duration, and facilitate broader public participation in judicial processes. However, the implementation of technology-based judicial systems may also face challenges related to technological limitations, unequal internet access, cybersecurity concerns, and institutional adaptation. These issues may significantly affect the success of digital transformation initiatives.

Previous studies on judicial digitalization have predominantly focused on single-country perspectives or have examined technological implementation without emphasizing comparative dimensions. Existing literature generally discusses the benefits and challenges of electronic judicial services in improving institutional performance and legal accessibility. Nevertheless, limited scholarly attention has been directed toward comparative analyses between Southeast Asian countries, particularly regarding how differences in legal structures and institutional arrangements influence the effectiveness of e-court systems. This indicates a significant research gap requiring further academic exploration.

The selection of Purwokerto District Court as a case study provides an important empirical context for understanding the implementation of digital judicial services at the local institutional level in Indonesia. Examining the experience of a district court allows a more detailed analysis of practical challenges and institutional responses within the process of judicial digitalization. Furthermore, comparing this experience with Malaysian courts enables a broader understanding of how different judicial systems adapt to technological transformation while pursuing similar objectives of justice accessibility and service efficiency.

Based on the aforementioned background, this study aims to comparatively evaluate the effectiveness of e-court services in Indonesia and Malaysia, focusing specifically on the implementation of digital court systems at Purwokerto District Court and Malaysian courts.

⁶ Muhammad Amjad Adhyaksa Arifin, "Realizing Progressive Law through E-Courts in Indonesian Civil Procedure Law: A Comparative Study," *Pakistan Journal of Life and Social Sciences (PJLSS)* 23, no. 1 (2025), <https://doi.org/10.57239/PJLSS-2025-23.1.00378>.

⁷ Ulfah Dwi Rahmawati et al., "Digital Transformation in Case Handling: A Juridical Review of Technology Utilization in the Justice System in Indonesia and Malaysia," *Unnes Law Journal* 10, no. 1 (April 2024): 43–80, <https://doi.org/10.15294/ulj.v10i1.3668>.

This research seeks to analyze similarities and differences in digital justice implementation, identify factors influencing institutional effectiveness, and assess the implications of digital transformation for improving access to justice. The findings of this study are expected to contribute to the development of comparative legal scholarship and provide practical recommendations for strengthening digital judicial systems in both countries.

RESEARCH METHODS

This study employs a qualitative research design using a comparative socio-legal approach to examine the effectiveness of digital transformation in civil justice systems in Indonesia and Malaysia.⁸ The socio-legal approach is utilized because the implementation of e-court services cannot be understood solely through normative legal analysis but also requires examination of social, institutional, and technological dimensions influencing judicial practices. The comparative framework enables a systematic analysis of similarities and differences in the implementation of electronic judicial services between Purwokerto District Court in Indonesia and selected Malaysian courts. This research focuses on evaluating several indicators of effectiveness, including accessibility, procedural efficiency, transparency, service quality, institutional readiness, and challenges encountered in the digitalization process.

The study relies on qualitative data collected through library research and document analysis. Primary legal materials include judicial regulations, statutory provisions, and policies governing e-court implementation in Indonesia and Malaysia. Secondary data consist of academic journal articles, books, institutional reports, judicial publications, and relevant previous studies discussing digital justice systems and court modernization. The collected data were analyzed using comparative and descriptive-analytical methods involving data reduction, classification, interpretation, and synthesis to identify patterns and differences in both legal systems.⁹ Through this analytical process, the study seeks to generate a comprehensive understanding of the effectiveness of e-court services and the broader implications of digital transformation within contemporary civil justice administration.

ANALYSIS AND DISCUSSION

Digital Transformation and E-Court System in Civil Justice Administration in Indonesia and Malaysia

Digital transformation has become a significant phenomenon in contemporary public administration, influencing the way institutions organize and deliver services to society.¹⁰ The emergence of digital technologies has changed conventional administrative structures by introducing technology-based mechanisms capable of improving efficiency, transparency, and

⁸ John W Creswell and J David Creswell, *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (Sage publications, 2017).

⁹ Muhammad Mutawalli Mukhlis et al., "Law Reform in Parliamentary Democratization: A Comparative Study of Legislative Terms in Indonesia, Philippines, and the United States of America," *Journal of Law and Legal Reform* 6, no. 3 (July 31, 2025): 1079–1122, <https://doi.org/10.15294/JLLR.V6I3.20664>.

¹⁰ Ruzayana et al., "Judicial System Digitalization: The Constitutionality of the E-Court System in Southeast Asia."

institutional responsiveness.¹¹ Within the judicial sector, digital transformation is increasingly viewed as a strategic approach to modernizing legal institutions and enhancing the effectiveness of justice administration. The integration of technology into judicial processes represents a shift from traditional paper-based systems toward electronic and data-driven management systems.

The concept of digital transformation extends beyond the simple adoption of technological tools. It refers to a comprehensive process involving organizational restructuring, procedural adaptation, and changes in institutional culture supported by technological innovation.¹² In judicial institutions, digital transformation encompasses the redesign of legal procedures and administrative mechanisms to improve service quality and facilitate broader access to legal systems. Consequently, the implementation of digital systems requires not only technological infrastructure but also institutional readiness and adaptive regulatory frameworks.

Judicial institutions have historically relied on conventional procedures characterized by physical documentation, face-to-face interactions, and lengthy administrative processes. Such traditional systems often create procedural complexities that may hinder effective access to justice. Delays in case processing, high administrative costs, and geographical barriers frequently limit public access to legal services. Therefore, judicial modernization through digital technology has emerged as an important solution to address these institutional challenges.¹³

The development of digital justice systems reflects broader transformations occurring within modern governance structures. Governments worldwide have increasingly adopted electronic platforms to improve public administration and enhance institutional accountability. The judicial sector is not exempt from these changes, as courts have gradually implemented technological innovations to simplify administrative procedures and reduce operational inefficiencies. These developments indicate a paradigm shift toward more integrated and technology-oriented justice systems.¹⁴

The implementation of electronic court systems, commonly referred to as e-court services, represents one of the most significant innovations within contemporary judicial administration. E-court systems facilitate the digital management of legal procedures, including case registration, document submission, electronic payment, and virtual hearings. By reducing dependence on physical interactions and manual documentation, these systems aim to create faster and more efficient legal processes.¹⁵ Furthermore, electronic judicial mechanisms may contribute to

¹¹ Siti Mariyam et al., "Safeguarding Personal Data in Indonesian E-Commerce From a Constitutional Rights Perspective," *Jambe Law Journal* 8, no. 2 (December 31, 2025), <https://doi.org/10.22437/X5Q9Y093>; Daud Rismana, Hajar Salamah Salsabila Hariz, and Fenny Bintarawati, "Kajian Hukum Terhadap Efektifitas Perkuliahan Di Tengah Pandemi Covid-19," *Volksgeist: Jurnal Ilmu Hukum Dan Konstitusi* 5, no. 1 (June 29, 2022): 53–68, <https://doi.org/10.24090/VOLKSGEIST.V5I1.5137>.

¹² Amarini et al., "Digital Transformation: Creating an Effective and Efficient Court in Indonesia."

¹³ Taun, Affandi, and Rahman, "Application of E-Court in Different Countries: A Comparative Study in the Development of E-Court."

¹⁴ Rahmawati et al., "Digital Transformation in Case Handling: A Juridical Review of Technology Utilization in the Justice System in Indonesia and Malaysia."

¹⁵ Sheila Kusuma Wardani Amnesti et al., "Enhancing Sustainable Development Efficiency Through a Single Smart City Platform: A Cost-Benefit Policy Perspective from Indonesia," *Volksgeist: Jurnal Ilmu Hukum Dan Konstitusi*, May 2025, 151–69, <https://doi.org/10.24090/volksgeist.v8i1.12584>.

reducing administrative burdens experienced by both judicial institutions and court users.¹⁶

The emergence of e-court systems has significantly transformed civil justice administration by introducing new mechanisms for legal service delivery. Digital court services enable litigants, legal practitioners, and judicial personnel to engage with judicial processes through electronic platforms without being constrained by geographical limitations. Such developments contribute to the realization of a more flexible and accessible justice system.¹⁷ Consequently, technological innovation increasingly plays a central role in supporting judicial performance and institutional effectiveness.

In Indonesia, judicial digitalization has experienced considerable development through the introduction of e-court systems under the authority of judicial institutions.¹⁸ The implementation of electronic court services aims to simplify judicial procedures and improve legal service accessibility for justice seekers. Digital services within Indonesian courts include electronic filing systems, online payment mechanisms, electronic summons, and virtual court proceedings. These initiatives demonstrate institutional efforts to modernize judicial administration in response to technological developments and public demands.

The legal framework governing e-court implementation in Indonesia serves as an important foundation for judicial digitalization.¹⁹ Judicial regulations and institutional policies have been developed to support electronic legal processes and provide procedural certainty within digital environments. Such regulations establish standards for technological utilization and define legal mechanisms necessary to ensure the legitimacy and effectiveness of electronic judicial procedures. The existence of a clear legal framework contributes significantly to institutional consistency in implementing digital reforms.

Malaysia has also demonstrated substantial progress in integrating technology into judicial administration through various digital initiatives. Judicial modernization programs in Malaysia have introduced electronic filing systems and digital court services aimed at improving procedural efficiency and institutional performance. The Malaysian judicial system has adopted technological mechanisms designed to facilitate legal processes while minimizing procedural delays and administrative inefficiencies. These reforms reflect broader governmental efforts to improve public service quality through digital innovation.²⁰

The legal and institutional framework supporting judicial digitalization in Malaysia plays an important role in facilitating the implementation of electronic judicial systems. The integration of legal regulations with technological policies contributes to creating a more coordinated and effective judicial environment. Strong institutional support may enhance

¹⁶ Arifin, "Realizing Progressive Law through E-Courts in Indonesian Civil Procedure Law: A Comparative Study."

¹⁷ M Kenza Radhya EA, "Literature Review: The Development of E-Court System Technology as a Transformation of Indonesian Law in the COVID-19 Pandemic Era," 2021.

¹⁸ Dedi Putra, "A Modern Judicial System in Indonesia: Legal Breakthrough of E-Court and E-Legal Proceeding," *Jurnal Hukum Dan Peradilan* 9, no. 2 (July 2020): 275, <https://doi.org/10.25216/jhp.9.2.2020.275-297>.

¹⁹ Ahmad Tholabi Kharlie and Achmad Cholil, "E-Court and e-Litigation: The New Face of Civil Court Practices in Indonesia," *International Journal of Advanced Science and Technology* 29, no. 2 (2020): 2206–13.

²⁰ Elidar Sari et al., "Optimising and Digitalising the Technology-Based Electronic Justice in the 4.0 Era: A Judicial Reform," *Ieomsociety. Org*, 2021.

technological adaptation and encourage more efficient legal service delivery. Consequently, legal frameworks become critical elements in ensuring sustainable digital transformation within judicial institutions.

Despite similarities in pursuing judicial modernization, Indonesia and Malaysia demonstrate differences in technological development, institutional capacity, and legal implementation mechanisms. Variations in digital literacy, technological infrastructure, and administrative practices may influence the effectiveness of e-court systems in each country. These differences indicate that technological innovation alone does not automatically guarantee successful judicial transformation. Institutional readiness and legal adaptation remain essential factors influencing the overall effectiveness of digital reforms.

The ultimate objective of judicial digitalization is not merely the adoption of advanced technologies but the enhancement of access to justice within society. Access to justice involves the ability of individuals to obtain legal protection and judicial services without experiencing unnecessary barriers. Technology has the potential to reduce procedural complexity, minimize costs, and improve public accessibility to legal institutions. Therefore, digital transformation within civil justice administration should be understood as an institutional strategy intended to establish a more inclusive, efficient, and responsive judicial system capable of addressing the evolving needs of modern society.

Implementation of E-Court Services at Purwokerto District Court and Malaysian Courts

The implementation of e-court services represents a significant development in judicial administration aimed at transforming conventional legal procedures into technology-based systems.²¹ Digital court services have become an important instrument for improving institutional effectiveness and facilitating public access to judicial mechanisms.²² In both Indonesia and Malaysia, the introduction of electronic judicial systems reflects broader efforts toward institutional modernization and administrative efficiency. The implementation process involves not only technological innovation but also organizational adaptation and procedural restructuring within judicial institutions.

At the practical level, the implementation of e-court systems requires the integration of various digital mechanisms into existing judicial processes. Courts are expected to establish electronic platforms capable of supporting case management and communication between judicial actors. Such digital mechanisms are intended to reduce procedural complexity and minimize administrative delays that traditionally characterize court services. Consequently, judicial institutions increasingly rely on technology as a means of improving service quality and institutional performance.²³

²¹ Ruzayana et al., "Judicial System Digitalization: The Constitutionality of the E-Court System in Southeast Asia."

²² Daud Rismana et al., "The Legal Effectiveness of Juvenile Diversion: A Study of the Indonesian Juvenile Justice System," *Khazanah Hukum* 7, no. 2 (June 21, 2025): 190–205, <https://doi.org/10.15575/KH.V7I2.44162>.

²³ Yasmita Yasmita et al., "The Implementation of E-Court at the Banten High Religious Court: Challenges, Barriers, and Prospects within Indonesia's Legal System," *Al-Qadha : Jurnal Hukum Islam Dan Perundang-Undangan* 12, no. 2 (September 2025): 431–50, <https://doi.org/10.32505/qadha.v12i2.11677>.

Purwokerto District Court serves as an important example of judicial digitalization at the local institutional level in Indonesia. The court has gradually implemented e-court services as part of broader judicial reforms initiated by national judicial authorities. Through the integration of electronic systems, several administrative and procedural activities have shifted from conventional methods toward online platforms.²⁴ This transformation reflects institutional efforts to respond to technological developments and changing public expectations regarding legal services.

The implementation mechanism of e-court services at Purwokerto District Court generally involves a sequence of electronically integrated judicial procedures. Users are able to access court services through digital platforms designed to facilitate legal processes. Electronic systems enable litigants and legal representatives to conduct administrative activities without requiring continuous physical attendance at court facilities. Such developments contribute to improving procedural flexibility and reducing administrative burdens on court users.²⁵

Electronic case registration constitutes one of the most important features within the e-court system implemented at Purwokerto District Court. Through digital platforms, litigants may submit case applications electronically without relying on manual registration procedures. The use of electronic registration mechanisms reduces procedural inefficiencies and allows users to access judicial services regardless of geographical limitations. Additionally, electronic systems improve administrative organization and facilitate data management within judicial institutions.

Another important component of digital judicial services is the implementation of electronic payment systems. Conventional payment procedures often involve administrative complexity and lengthy processing mechanisms. Through e-payment systems, court users may conduct financial transactions electronically using integrated digital platforms. Such innovations contribute to greater procedural efficiency by reducing transaction time and minimizing potential administrative errors.²⁶

The implementation of electronic filing systems further strengthens judicial digitalization by facilitating online document submission and management. Through e-filing mechanisms, legal documents may be submitted and processed electronically, reducing dependence on physical documentation. Electronic filing systems contribute to more efficient information management and simplify procedural requirements for litigants and legal practitioners.²⁷ Consequently, judicial institutions may improve administrative effectiveness while reducing operational costs.

In addition to electronic filing and payment systems, e-summons mechanisms also represent an important component of judicial digitalization. Traditional summons procedures frequently

²⁴ Muhammad Adithya, Lukman Samboteng, and Agus Priyanto, "Assessing the Effectiveness of the E-Court System Implementation Using the End-User Computing Satisfaction Model at Kotabaru District Court," *Golden Ratio of Law and Social Policy Review* 5, no. 2 (January 2026): 250–66, <https://doi.org/10.52970/grlspr.v5i2.1881>.

²⁵ Alam et al., "Identifying Problems and Solutions of The E-Court System of Religious Courts in Indonesia: An Analytic Network Process Study."

²⁶ Amarini et al., "Digital Transformation: Creating an Effective and Efficient Court in Indonesia."

²⁷ Andean Al Ikhsan and Rachman Adi Wibowo, "Polemic on the Legitimacy of Proof of E-Court Trial at the State Administrative Court (Harmonization of Legal Courts and Information Technology in the Covid-19 Pandemic Era)," *Indonesian State Law Review (ISLRev)* 6, no. 1 (April 2023), <https://doi.org/10.15294/islrev.v6i1.68235>.

require substantial time and administrative resources due to physical delivery processes. Through electronic summons systems, notifications and legal communications can be delivered more efficiently using digital channels. Such systems enhance procedural speed and improve communication between judicial institutions and court users.

The implementation of virtual hearings has also emerged as a major innovation within contemporary judicial administration.²⁸ Virtual court proceedings allow judicial actors to participate in legal processes through electronic communication technologies. This mechanism became increasingly significant during periods requiring restrictions on physical interactions. Furthermore, virtual hearings provide greater flexibility in legal proceedings while maintaining continuity within judicial processes.

Similar developments can be observed within Malaysian courts, where digital judicial practices have become increasingly integrated into court administration.²⁹ Malaysian judicial institutions have implemented various technological systems intended to improve procedural efficiency and facilitate legal service delivery. Electronic mechanisms have been introduced to support case management, legal documentation, and communication among judicial actors. These initiatives demonstrate the commitment of judicial institutions to strengthening technological adaptation within legal systems.

The effectiveness of digital judicial implementation in both Indonesia and Malaysia is closely related to institutional readiness and technological infrastructure.³⁰ Successful implementation requires sufficient technological facilities, reliable internet connectivity, and adequate administrative support. Human resource capacity also plays an essential role in ensuring effective utilization of digital platforms. Institutional readiness therefore becomes a critical factor influencing the sustainability and effectiveness of judicial digitalization initiatives.

Despite considerable progress in digital transformation, several challenges continue to affect the implementation of e-court services in both countries. Unequal technological infrastructure, differences in digital literacy, cybersecurity concerns, and resistance to institutional change may hinder effective implementation. Technical problems within digital platforms may also create procedural difficulties for users unfamiliar with technology-based systems. Therefore, achieving successful judicial digitalization requires continuous institutional adaptation, technological improvement, and policy development to ensure broader accessibility and greater effectiveness within civil justice administration.

Comparative Evaluation of E-Court Effectiveness and Its Implications for Access to Justice

The effectiveness of e-court services has become an important issue in contemporary judicial studies because digital transformation is expected to improve both institutional performance and

²⁸ Zuhairah Ariff Abd Ghadas and Rabiatul Adawiyah Mohd Ariffin, "E-Court System in the Civil and Shariah Courts: Malaysia Perspectives," in *Proceedings of the International Conference on Islamic Civilization and Technology Management*, vol. 23, 2019, 530–49.

²⁹ Taun, Affandi, and Rahman, "Application of E-Court in Different Countries: A Comparative Study in the Development of E-Court."

³⁰ Rahmawati et al., "Digital Transformation in Case Handling: A Juridical Review of Technology Utilization in the Justice System in Indonesia and Malaysia."

public access to legal services.³¹ Evaluating the effectiveness of electronic judicial systems requires an examination of various dimensions beyond technological functionality alone. Factors such as accessibility, efficiency, transparency, institutional adaptation, and user experience significantly influence the overall performance of digital judicial systems. Therefore, comparative analysis between Indonesia and Malaysia provides an important framework for understanding how different judicial environments shape the effectiveness of e-court implementation.

A comparative approach allows the identification of similarities and differences in digital judicial practices between both countries. Although Indonesia and Malaysia share common objectives in modernizing judicial administration, their implementation mechanisms are influenced by distinct legal and institutional contexts.³² The effectiveness of digital court services may therefore vary depending on the structure of legal systems, institutional arrangements, and technological capacity. Comparative evaluation enables a deeper understanding of the factors contributing to successful digital transformation within judicial institutions.

One of the principal indicators of e-court effectiveness is accessibility. Digital judicial systems are designed to eliminate barriers that traditionally limit public access to courts. Through electronic mechanisms, users may access judicial services without requiring continuous physical attendance or geographical proximity to court facilities. Improved accessibility contributes to a more inclusive legal environment where individuals can obtain judicial services more efficiently. In both Indonesia and Malaysia, digital platforms have significantly expanded opportunities for individuals and legal practitioners to engage with judicial institutions.³³

However, the degree of accessibility achieved through e-court implementation differs between both countries due to variations in technological infrastructure and public readiness. Urban areas generally demonstrate stronger digital connectivity and greater technological literacy compared to rural regions. Consequently, disparities in internet access and technological availability may create unequal opportunities for justice seekers. Such conditions indicate that technological implementation alone cannot fully guarantee equitable access to judicial services.³⁴

Procedural efficiency also constitutes an important element in evaluating digital court systems.³⁵ Conventional judicial processes frequently involve lengthy administrative procedures characterized by extensive documentation requirements and repeated physical interactions. E-court systems seek to simplify these procedures through automation and electronic integration. As a result, judicial institutions may reduce administrative burdens and improve the speed of legal proceedings. Comparative observations suggest that both Indonesia and Malaysia have experienced considerable procedural improvements through judicial digitalization.

³¹ Rozha Kamal Ahmed et al., "Impact of E-Court Systems Implementation: A Case Study," *Transforming Government: People, Process and Policy* 15, no. 1 (March 2021): 108–28, <https://doi.org/10.1108/TG-01-2020-0008>.

³² Tanvi Sharma, "Access to Justice in the Digital Age: The Effectiveness of e-Courts and Virtual Hearings" (Vilniaus universitetas., 2026).

³³ Heni Rosida et al., "The Effectiveness of The Implementation of the E-Court Justice System and The Impact on Administrative Court in Indonesia," *Ikatan Penulis Mahasiswa Hukum Indonesia Law Journal* 2, no. 2 (2022): 258–72, <https://doi.org/https://doi.org/10.15294/ipmhi.v2i2.58270>.

³⁴ Mulyani Zulaeha, "E-Courts in Indonesia: Exploring the Opportunities and Challenges for Justice and Advancement to Judicial Efficiency," *International Journal of Criminal Justice Sciences* 18, no. 1 (2023): 183–94.

³⁵ Adithya, Samboteng, and Priyanto, "Assessing the Effectiveness of the E-Court System Implementation Using the End-User Computing Satisfaction Model at Kotabaru District Court."

The implementation of electronic registration, e-payment systems, digital filing mechanisms, and virtual hearings has contributed significantly to procedural efficiency in both countries. Such mechanisms reduce unnecessary administrative delays and enable users to complete legal procedures more rapidly.³⁶ Nevertheless, the effectiveness of these systems depends on technological stability and institutional support. Technical disruptions or limited system integration may reduce operational efficiency and create procedural obstacles for users.

Another important dimension of effectiveness relates to transparency within judicial administration. Transparency represents a fundamental principle in modern legal systems because it promotes accountability and public trust in judicial institutions. Digital platforms provide opportunities to improve transparency by facilitating access to case information and procedural updates. Electronic systems may reduce administrative ambiguity and increase public monitoring of judicial processes.³⁷

The quality of judicial administration also influences the effectiveness of e-court implementation. Administrative quality involves the capacity of institutions to deliver legal services in a consistent, reliable, and responsive manner. Digital technologies can strengthen service quality by improving communication mechanisms and reducing procedural complexity. However, technological systems require continuous institutional supervision to ensure that digital platforms function effectively and meet public expectations.

Comparative findings further indicate that differences in legal culture significantly influence the implementation of digital judicial systems. Legal culture refers to societal attitudes, institutional values, and behavioral patterns associated with legal processes. Different legal cultures may affect the willingness of judicial actors and court users to adopt technological innovations. Resistance to technological change may emerge when digital mechanisms conflict with established procedural practices or traditional institutional perspectives.³⁸

Institutional adaptation also represents a critical factor influencing the success of judicial digitalization. The implementation of technological systems often requires substantial organizational changes involving administrative structures and human resources. Judicial institutions must establish adequate training programs and technological support systems to facilitate adaptation processes. Countries with stronger institutional capacity generally demonstrate more effective implementation of digital reforms due to greater administrative preparedness.

Digital literacy among court users and judicial personnel constitutes another important determinant of e-court effectiveness. Digital systems require users to possess basic technological competencies necessary for navigating electronic platforms. Limited digital literacy may create practical barriers for individuals unfamiliar with technology-based systems. Therefore,

³⁶ Aju Putrijanti and Kadek Cahya Susila Wibawa, "The Implementation of E-Court in Administrative Court to Develop Access to Justice in Indonesia," *Journal of Environmental Treatment Techniques* 9, no. 1 (2021): 105–9.

³⁷ Taun, Affandi, and Rahman, "Application of E-Court in Different Countries: A Comparative Study in the Development of E-Court."

³⁸ Mohammed Abubakr Ahmed, Tugberk Kaya, and Tolgay Karanfiller, "Evaluating E-Court Systems in Regional Governments in Developing Countries Using Technology Acceptance Model," *Information Development* 42, no. 2 (June 2026): 614–30, <https://doi.org/10.1177/02666669241229176>.

improving technological awareness and educational support becomes necessary to ensure broader utilization of digital judicial services.

The findings of this comparative study suggest that digital transformation has substantial implications for improving access to justice and guiding future judicial reforms. The effectiveness of e-court services is influenced not only by technological innovation but also by institutional capacity, legal culture, and public readiness. Future judicial reforms should therefore adopt comprehensive approaches integrating technological development with legal adaptation and institutional strengthening. Through such integrated strategies, digital transformation may contribute to establishing a more accessible, transparent, efficient, and responsive civil justice system capable of addressing evolving societal needs.

CONCLUSION

This study concludes that the digital transformation of civil justice through the implementation of e-court services in Indonesia and Malaysia represents a significant development in judicial modernization aimed at improving the effectiveness, efficiency, and accessibility of legal services. The comparative analysis demonstrates that both countries have adopted digital judicial mechanisms as institutional strategies to simplify administrative procedures and strengthen access to justice. The implementation of electronic systems, including e-filing, e-payment, e-summons, and virtual hearings, has contributed to reducing procedural complexity and improving service delivery within judicial institutions. However, the effectiveness of these systems is not determined solely by technological advancement but is also influenced by regulatory frameworks, institutional readiness, technological infrastructure, and the capacity of judicial actors to adapt to digital transformation. Furthermore, the study finds that differences in legal culture, institutional adaptation, and levels of digital literacy significantly affect the implementation and performance of e-court systems in both countries. While digital judicial services have created opportunities for broader and more efficient access to legal processes, several challenges remain, including unequal technological access, infrastructure limitations, and varying levels of technological competence among users. Therefore, future judicial reforms should adopt comprehensive and sustainable approaches that integrate technological innovation with institutional strengthening, regulatory development, and digital literacy enhancement. Such integrated efforts are necessary to ensure that digital transformation not only modernizes judicial administration but also contributes to the realization of a more inclusive, transparent, and accessible civil justice system.

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- Adithya, Muhammad, Lukman Samboteng, and Agus Priyanto. "Assessing the Effectiveness of the E-Court System Implementation Using the End-User Computing Satisfaction

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