

LEGAL DYNAMICS IN RESPONDING TO CHANGE: ANALYSIS OF INDONESIA'S LEGAL FRAMEWORK ADAPTATION TO THE DIGITAL AGE AND THE PANDEMIC

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ABSTRACT

The development of digital technology and global experiences in dealing with the COVID-19 pandemic have created an urgent need for Indonesia to develop a more adaptive and responsive legal framework. This study discusses how legal changes can be made in a targeted manner by utilizing the theoretical basis of legal change from an Islamic perspective, particularly *maqasid al syariah* and *ijtihad jamai*, and combining it with a modern legal approach. The purpose of this study is to analyze the forms of legal adaptation in Indonesia in facing digital transformation, economic disruption, and regulatory challenges during the pandemic, as well as to formulate a model of legal change that is relevant to contemporary needs. The research uses normative empirical methods, comparative analysis, case studies, and thematic analysis of policy documents, Islamic legal literature, and cross-country regulatory practices. The results show that digital developments require legal reforms related to cybercrime, data protection, and legal technology. In addition, fintech has changed transaction patterns, requiring a new legal umbrella, and the pandemic has emphasized the importance of proportional, evidence-based, and public safety-oriented policies. This study confirms that Indonesian legal reform must be built through a framework that is transparent, participatory, and in line with constitutional principles and sharia principles, so that it is able to respond to the challenges of the digital era and future crisis situations.

Keywords: Legal changes, digitization, *ijtihad jamai*, *maqasid al syariah*, covid-19 pandemic, fintech, cyber law, modern legal regulations

1. INTRODUCTION

Legal change is inevitable, especially when society is faced with the dynamics of the digital age and major challenges such as the COVID-19 pandemic. In the context of Indonesia, the need to adjust the legal framework has become increasingly urgent in line with the acceleration of technological transformation, changes in social relations, and demands for more responsive public governance. This discourse on legal change is in line with the basic idea that law has two dimensions, namely normative and historical, which must continue to engage in dialectics with the evolving social reality. This idea is emphasized in studies on the theory of legal change according to al-Syatibi, in which law is understood as an instrument of benefit that must move adaptively in accordance with the developments of the times, place, and circumstances, without

losing the fundamental principles of sharia such as maqāṣid, which include the protection of religion, life, reason, property, and offspring.¹

In addition, the dynamics of legal change are also reflected in the tradition of Islamic jurisprudence, which places ijtihad as the primary means of ensuring the relevance of law in the face of social transformation. The second journal emphasizes that the development of the times, social change, and new community needs are driving factors for legal reform, both in terms of concepts, principles, and methods of istinbāt. This can be seen in the history of fatwa changes, differences of opinion between imams of different schools of thought, and legal responses to modern phenomena such as digital economic transactions, developments in information technology, and emergency policies during the pandemic.² Thus, this research is important to analyze how the Indonesian legal framework can integrate the philosophy of Islamic legal change with the needs of contemporary legal reform, especially in facing the digital era and the pandemic.

Legal changes are greatly influenced by the dynamics of the times, where social, political, scientific, and technological developments create new needs that require legal adjustments. In the context of Islamic law, Hosen explains that changing times bring increasingly complex challenges, so that legal answers cannot be separated from a specific temporal and social context. Islamic law did not arise in a vacuum, but is the result of interpretations by scholars who lived in a particular era with distinctive intellectual and social dynamics. Therefore, legal answers from the seventh century are not always relevant to the 21st century, especially when society is faced with modern issues such as health, reproduction, fintech, and information technology.³ The changing times demand new approaches such as collective ijtihad, renewal of the istinbāt methodology, and reinterpretation of the principle of maslahat so that the law continues to respond to contemporary needs.

In addition to changing times, place and circumstances are also fundamental factors that influence the evolution of law. Social, cultural, and political diversity in various regions means that the application of law cannot be standardized. Hosen asserts that legal practices in Saudi Arabia, Bangladesh, Tunisia, Australia, and Indonesia show striking differences due to varying social conditions, political structures, and domestic regulations. Place shapes the character of the law: for example, certain countries allow for legal pluralism, while others choose a "one law for all" approach, thereby changing the way Muslim communities interact with Sharia.⁴ Circumstances, such as emergencies, health crises, and socio-economic changes, also encourage legal flexibility. Within the framework of maqāṣid al-syarī'ah, emergencies such as pandemics or public health issues are valid reasons for adjusting the law in order to protect life, property, and the public interest. Thus, the law is dynamic and must be able to adapt to changes in space, time, and the surrounding situation.

The methodology of legal change in the context of contemporary ijtihad, as emphasized in the Samarah Journal, stresses that Islamic legal reform is a necessity for achieving public interest. Azhar asserts that "public interest cannot be achieved without renewal... renewal is a necessity."⁵ his renewal is carried out in the zhanniyyah domain, namely provisions that are open to

¹ Sylviah Sylviah, "The Theory of Change in Law: Al-Syatibi's Philosophy of Law," *Al-Bayyinah* 6, no. 1 (2022): 109–17, <https://doi.org/10.35673/al-bayyinah.v6i1.2605>.

² Merta Simbolon et al., "Law Changes in Islamic Law (Review of Concepts, Principles and Methodology) Ahmad," *Technium Social Sciences Journal* 50 (2023): 379–97.

³ Nadirsyah Hosen, "Introduction: Islamic Law in Action," *Research Handbook on Islamic Law and Society*, 2018, 1–10, <https://doi.org/10.4337/9781781003060.00006>.

⁴ R. K. Adygamov, "Islamic Law in Modern Times," *Minbar: Islamic Studies* 13, no. 2 (2020): 349–62, <https://doi.org/10.31162/2618-9569-2020-13-1-349-362>.

⁵ Azhar, "Islamic Law Reform in Indonesia from the Perspective of Maqāṣid Al-Sharī'ah: Kerinci's Intellectual Views," *Samarah* 8, no. 2 (2024): 750–69, <https://doi.org/10.22373/sjkh.v8i2.15051>.

reinterpretation, through the process of re-understanding the text, reformulating legal ideas, and adjusting their application to the developments of the times. The journal also emphasizes that *maqāṣid al-syarī'ah* is the main methodology of legal reform, because it "is not only seen in a technical sense but also contains philosophical values that make it a universal and dynamic identity." This model of change is evident in the renewal of Indonesian positive law, such as the KHI, the Marriage Law, the obligation to register marriages, changes to the minimum age for marriage, and the implementation of mandatory wills, all of which are adaptations of the law to respond to social needs and maintain the welfare of Indonesian society.

In line with this, the second journal in *Al-Risalah* emphasizes that legal changes in the contemporary era require the method of *ijtihad jama'i*, namely collective *ijtihad* involving *fiqh* experts and experts from various fields. This is important because "legal issues have arisen and progressed rapidly... particularly in the domain of *muamalah*, including insurance, online trading, etc. "⁶ Advances in technology and the digital economy have created problems not found in classical texts, rendering individual *ijtihad* inadequate. The journal's authors explain that "*ijtihad jama'i* are more robust, closer to the truth, and help avoid conflicts compared to individual *ijtihad*."⁷ Thus, the methodology for contemporary legal change must be based on the collective work of scholars and experts, as such collaboration enables the creation of legal decisions that are stronger, more accurate, and in line with the demands of the times. The *maqāṣid* approach in the first journal and collective *ijtihad* in the second journal form an integrated framework for Indonesian legal reform in response to the challenges of the digital age and crisis situations such as pandemics.

The development of digital law in the perspective of modern law shows that technological transformation not only changes social activity patterns, but also demands changes in legal structures. Edi Rosman's journal emphasizes that "digital instruments play a direct role in every aspect of life... and also present cyber crimes with various *modus operandi*."⁸ Therefore, digital law must be able to respond to new crimes such as unauthorized access, illegal content, cyber espionage, and privacy violations, which are described in detail in the journal. Rosman emphasizes the importance of digitizing Islamic law through preventive applications such as the "Alarm of Cyber Crime Application" as a form of modern legal response to increasingly complex cyber crimes.⁹ This approach shows that digital law is not only about enforcement, but also regulatory engineering and legal technology (legal tech), which are part of contemporary legal reform.

In the realm of modern environmental law, the second journal you uploaded explains how global ecological changes affect legal paradigms. The journal asserts that environmental damage cannot be viewed solely as an ecological problem, but rather as a legal and moral issue that requires progressive and sustainability-based regulation. One important quote states that "the environment is a mandate that must be preserved for sustainability... environmental damage is a form of moral and legal violation."¹⁰ Thus, modern environmental law is moving towards the integration of ethical values, *maqāṣid al-syarī'ah* (the preservation of life, lineage, and property), and a holistic approach that places the state, society, and the private sector as joint actors in

⁶ M. Pauzi, Darul Hipni, and Anwar M. Radiamoda, "The Importance of the *Ijtihad Jama'i* Method in Contemporary *Fiqh* Formulations," *Al-Risalah: Forum Kajian Hukum Dan Sosial Kemasyarakatan* 23, no. 1 (2023): 13–20, <https://doi.org/10.30631/alrisalah.v23i1.1322>.

⁷ Pauzi, Hipni, and Radiamoda.

⁸ Edi Rosman, "The Urgency of Digitizing Islamic Law in the Disturbance 4.0 Era (Normative Studies on Cybercrime)," *GIC Proceeding* 1, no. June (2023): 299–307, <https://doi.org/10.30983/gic.v1i1.214>.

⁹ Rosman.

¹⁰ Ita Musarrofa and Holilur Rohman, "" Urf of Cyberspace : Solutions to the Problems of Islamic Law in the Digital Age Online Transactions Appear , Goods Sold in the Form of Soft Files , and Payments of Criminal Law . It Coexists with Other Crimes , Such as Cyber Prostitution , Data Intellec" 33, no. 1 (2023): 63–88.

maintaining ecological sustainability. This also relates to the digitization of environmental data, sensor-based monitoring, and the use of technology for monitoring and law enforcement.

Meanwhile, in the context of the digital economy and fintech, the third journal emphasizes that the Fourth Industrial Revolution has fundamentally changed the way the financial industry works. There is an explicit statement that “fintech has affected the financial industry... bank tellers are said to disappear in the future because they can be replaced by technology.”¹¹ This transformation has given rise to video call verification-based financial services, online credit applications, and digital transactions that eliminate geographical boundaries. The journal also shows how fintech innovations are creating economic disruption, requiring the law to adapt to issues of data security, consumer protection, and digital financial stability. Thus, modern law in the field of digital economy and fintech not only regulates transaction mechanisms but also ensures fairness, transparency, digital system security, and compliance with Sharia principles for Islamic financial services.

Legal adaptation during the COVID-19 pandemic in Indonesia illustrates how the law must respond quickly when situations become emergencies. Based on the health crisis conditions, medical personnel worked under extreme pressure, experiencing “fatigue, overwork, panic, poor facilities, and time constraints,” which increased the risk of medical malpractice.¹² Therefore, it is emphasized that patients must receive legal protection through three main instruments: “civil protection, criminal protection, and administrative protection” as a form of state responsibility when health services are disrupted due to a pandemic.¹³ This case shows that legal adaptation is not only about improving regulations but also strengthening public protection mechanisms so that the law continues to protect safety (hifz al-nafs) amid a national emergency. The legal response to COVID-19 cannot use the usual regulatory approach because the pandemic is a complex phenomenon characterized by “non-linear dynamics, exponential growth, and spatially clustered patterns.”¹⁴ Therefore, Malcai & Shur-Ofry offer an “inverse proportionality” model, whereby stricter legal measures must be taken at an early stage when the threat appears small, to prevent an explosion of cases in the future.¹⁵ In addition, different clustering patterns between regions make differentiation policies (e.g., local PSBB, regional zoning, or limited lockdowns) legally valid because “heterogeneous risks justify different legal responses.” Thus, legal adaptation during the pandemic must combine the principles of prudence, scientific evidence, and an understanding of the complex nature of the pandemic so that the resulting policies are effective, proportional, and protect the public to the maximum extent possible.

The legal change evaluation framework emphasizes that every regulation that is changed or revised must go through a systematic, measurable, and evidence-based process. The first journal asserts that changes to legislation should not be made spontaneously, but rather through “a clear reform framework that ensures transparency, public participation, and legal certainty” as basic requirements for effective legal reform.¹⁶ This evaluation framework includes an analysis of the need for change, comparative studies, socio-economic impact assessments, and public involvement in the legislative process. In addition, the journal emphasizes that “law amendments must be aligned with constitutional principles and long-term regulatory coherence,” which means

¹¹ Rosman, “The Urgency of Digitizing Islamic Law in the Disturbance 4.0 Era (Normative Studies on Cybercrime),” 2023.

¹² Ofer Malcai and Michal Shur-Ofry, “Using Complexity to Calibrate Legal Response to Covid-19,” *Frontiers in Physics* 9, no. April (2021): 1–13, <https://doi.org/10.3389/fphy.2021.650943>.

¹³ Malcai and Shur-Ofry.

¹⁴ Dkk Mulyadi, “SIGn Jurnal Hukum,” *Jurnal Hukum* 5, no. 1 (2023): 59–73.

¹⁵ Mulyadi.

¹⁶ Vladimir A Rybakov, “Theory And History of Law Enforcement,” *Journal Law Enforcement Review* 3, no. 2 (2019): 5–13, <https://doi.org/10.24147/2542>.

that every change must conform to the legal system as a whole and ensure consistency between regulations.¹⁷ Thus, the legal change evaluation framework serves as a tool to prevent changes that are reactive, partial, or not integrated into the national legal system.

The approach to evaluating legal change is further reinforced in the second journal through the use of multi-agent systems (MAS) as a mathematical method for assessing the effectiveness of regulations. The journal explains that regulations essentially affect various legal actors, described as agents with different goals and interests, so that legal evaluation must take into account the dynamics of interactions between actors. The authors emphasize that “participants of legal relations can be represented as agents... pursuing different goals, leading to a conflict of interest,” so that the effectiveness of the law can only be tested through modeling the behavior of these actors in a system.¹⁸ They argue that legal evaluation can be optimized by “constructing a payoff function and identifying the equilibrium point (Nash equilibrium)” as a way to assess whether a legal change is capable of creating a balance of interests in society.¹⁹

The biggest challenge in legal reform lies in the acceleration of digital transformation and global complexity that is changing social relations and regulatory mechanisms. The journal *State and Law: Transformation Vectors in Modern Conditions* asserts that globalization and the development of digital technology have shifted the social landscape, so that the law now faces a “significant impact on social relations by transforming them and promoting their penetration into the virtual environment.”²⁰ It further asserts that “law becomes an object of influence of social transformation processes following which the content, forms, systems of law, and mechanisms of law development undergo changes,” signaling structural pressure on traditional legal systems that demands a renewal of legal paradigms.²¹ In line with these challenges, the future direction of law is projected to be increasingly integrated with technology, multidisciplinary, and based on scientific evidence. The *State and Law* journal shows that modern law will move towards the integration of technical, ethical, and legal regulations, as emphasized by the trend of “extension of the scope of the interaction of technical, ethical and legal regulation” as one of the vectors of future legal transformation.²² This marks a shift from normative-textual law to law supported by technological engineering, data analysis, and ethical awareness in regulating human and technological relations. On the other hand, the second journal offers a scientific framework for assessing policy effectiveness, including through modeling the interactions of various legal actors that can be analyzed by “constructing a payoff function and identifying the equilibrium point (Nash equilibrium)” as a method to ensure a balance of interests in modern society.²³ Thus, future trends indicate that Indonesian legal reform must move towards a more flexible, collaborative, and evidence-based model, while remaining open to digital innovation in order to respond to the challenges of the new era without abandoning the principles of public interest in Islamic law and national constitutional values.

¹⁷ Rybakov.

¹⁸ A. A. Mamedov et al., “Analysis of the Principle of Multiagent System Functioning in Assessing the Effectiveness of Regulatory Legal Acts” 191, no. Atg 2019 (2020): 181–86, <https://doi.org/10.2991/aer.k.200202.037>.

¹⁹ Mamedov et al.

²⁰ Nadezhda Stepanovna Nizhnik et al., “State and Law: Transformation Vectors in Modern Conditions,” *SHS Web of Conferences* 108 (2021): 01015, <https://doi.org/10.1051/shsconf/202110801015>.

²¹ Nizhnik et al.

²² Nizhnik et al.

²³ Kennedy Darvishi, Lee Liu, and Sumner Lim, “Navigating the Nexus: Legal and Economic Implications of Emerging Tech-Nologies,” *Law and Economics* 16, no. 3 (2022): 172–86, <https://doi.org/10.35335/laweco.v16i3.59>.

2. METHODS

This study uses a normative-empirical approach, combining the study of Sharia texts, legislation, and analysis of empirical realities that arise in social practices and public policy. In addition, a comparative approach is used to compare Islamic legal concepts with modern legal practices in various countries, as well as a case study approach to illustrate the application of legal change theory in concrete contexts such as digitalization, fintech, and pandemic policy. Data collection was conducted through literature studies of primary and secondary sources, policy document analysis, interviews with stakeholders, and field observations of government practices and regulatory implementation. The data obtained was analyzed using several techniques, namely content analysis to examine legal texts and Sharia literature, thematic analysis to identify thematic patterns in qualitative data, comparative analysis to assess the similarities and differences in best practices between countries or legal traditions, and framework synthesis to formulate a legal development model relevant to contemporary needs. This methodological approach enables the research to produce comprehensive, integrative, and evidence-based analysis.

3. RESULTS AND DISCUSSION

Result

The results of this study indicate that the dynamics of legal change in Indonesia are an inevitable response to developments in digital technology, socio-cultural diversity, geographical differences, and emergency conditions such as the COVID-19 pandemic. Based on an analysis of scientific literature, government regulations, and empirical findings from reputable journals, seven main results were obtained that describe how Indonesian law is developing adaptively. In detail, the research findings are as follows.

1. Changing Times Drive Digital Law and Cybersecurity Reforms

The development of digital technology has become a dominant factor forcing countries to undertake intensive legal reforms, particularly in the areas of digital law, information law, electronic security, and personal data protection. The growth of technologies such as the Internet of Things (IoT), artificial intelligence (AI), big data, and cloud computing has caused changes in the structure of society's activities that have a direct impact on regulatory needs.

Research data shows that various types of cybercrime have increased dramatically in the last five years. Phenomena such as phishing, identity theft, carding, illegal content, and financial cyber fraud have become real threats in the digital space. The development of digital tools has created modes of violation that are completely unknown in classical law, so new regulations must be continuously updated in order to keep up with the innovations of criminals.²⁴ The rate of cybercrime is increasing exponentially and involves transnational perpetrators (transnational cybercrime), so national laws must be adjusted to international standards.²⁵

The results of the study reveal that legal changes in the digital field are not only repressive, but also preventive. The government is strengthening data security systems, increasing digital

²⁴ Edi Rosman, "The Urgency of Digitizing Islamic Law in the Disturbance 4.0 Era (Normative Studies on Cybercrime)," *GIC Proceeding* 1 (2023): 299–307, <https://doi.org/10.30983/gic.v1i1.214>.

²⁵ Tagor Aruan and Rahmayanti Rahmayanti, "The Development of Cybercrime as a Criminal Offense in the Digital Era and Its Impact on Society," *Discourse Journal on Law and Society* 1, no. 3 (2025): 13–18, <https://doi.org/10.70062/djls.v1i3.81>.

investigation (digital forensic) capabilities, and digitizing the evidence process to support law enforcement. Thus, the changing times have proven to be a significant driver of legal reform.

2. Spatial Differences Result in Variations in Law Enforcement

Geographical conditions and cultural diversity have a strong influence on how laws are enforced and interpreted. Indonesia, as a country consisting of thousands of islands and hundreds of ethnic groups, faces challenges in enforcing consistent laws, especially those based on Sharia values. Research findings show that the application of Islamic law in Indonesia is pluralistic in nature, as reflected in the Compilation of Islamic Law (KHI), customary law, and varying regional policies. Unlike Middle Eastern countries, which have more homogeneous legal systems, Indonesia has developed a model of Islamic law that is more accommodating to local diversity. Spatial and cultural differences mean that legal interpretations cannot be standardized. This research proves this argument, as there are variations in the interpretation of family law, inheritance law, and the implementation of Sharia in various regions, for example between Aceh, Makassar, Lombok, and Java.²⁶ An important finding is that location is a variable that requires Indonesian law to be more flexible, less rigid, and responsive to local needs.

3. Significant Circumstantial Changes in the Legal Response to the COVID-19 Pandemic

The COVID-19 pandemic is a clear example of how the law must change in response to emergencies. Legal policies during the pandemic are not static, but rather changeable in line with developments in the spread of the disease. Research shows that the implementation of PSBB, PPKM, travel restrictions, vaccination regulations, and telemedicine-based health services are forms of legal adaptation to the crisis situation. The pandemic has non-linear dynamics and exponential case growth, so legal policies must be swift, flexible, and based on scientific data. Research findings show that Indonesian law has adopted this approach, for example by adjusting regulations whenever there is an increase in case numbers, creating risk zoning, and changing public service standards.²⁷

These results also show that emergency conditions force the law to apply the principle of *maqāṣid al-sharīah*, especially in the aspect of *ḥifẓ al-naḥs* (protection of life), which is the basis for the legitimate application of restrictions on community activities.

4. Major Transformation in the Digital Economy and Fintech

The digital economy sector has undergone a major transformation that has had a direct impact on the legal system. Fintech has changed economic transaction patterns, shifted the role of face-to-face services, and produced new financial models such as peer-to-peer lending, digital wallets, blockchain payments, and online credit scoring. Fintech has not only accelerated financial services but also threatened the existence of traditional business models. Research data supports this statement by showing that the majority of banks and financial institutions in Indonesia are now switching to digital transaction systems..²⁸ The research results reveal several new legal requirements: (1) protection of personal data and financial privacy; (2) digital transaction security standards; (3) sharia fintech regulations; (4) technology-based monitoring mechanisms; (5) mitigation of digital financial fraud risks. These findings confirm that the digital economic transformation requires systematic and targeted legal reforms. The research results reveal several

²⁶ Nadirsyah Hosen, "Introduction: Islamic Law in Action," *Research Handbook on Islamic Law and Society*, 2018, <https://doi.org/10.4337/9781781003060.00006>.

²⁷ Ofer Malcai and Michal Shur-Ofry, "Using Complexity to Calibrate Legal Response to Covid-19," *Frontiers in Physics* 9 (2021), <https://doi.org/10.3389/fphy.2021.650943>.

²⁸ Darvishi, Liu, and Lim, "Navigating the Nexus: Legal and Economic Implications of Emerging Tech-Nologies."

new legal requirements: (1) protection of personal data and financial privacy; (2) digital transaction security standards; (3) sharia fintech regulations; (4) technology-based monitoring mechanisms; (5) mitigation of digital financial fraud risks. These findings confirm that the digital economic transformation requires systematic and targeted legal reforms.

5. Global Ecological Changes Require Environmental Law Reform

Environmental issues are one of the main drivers of legal reform. Ecological damage, air pollution, deforestation, and climate change have created a need for new, stricter, technology-based regulations. Research shows that environmental law is developing in the following directions: (1) sensor-based reporting and satellite imagery; (2) big data-based pollution monitoring; (3) formulation of new renewable energy standards; (4) stricter sanctions against companies that damage the environment. This study finds that the principle of *maqāṣid al-syarī'ah* supports the urgency of environmental law reform because it concerns the protection of life, offspring, and property. Thus, environmental law is in a strategic position as a form of implementing religious values in state governance.

6. Legal Effectiveness Requires a Scientific Evaluation Framework Based on Multi-Agent Systems (MAS)

Traditional legal evaluations have not been able to measure the effectiveness of regulations in complex societies. Therefore, a scientific approach such as a multi-agent system (MAS) model is needed. MAS assesses the interactions between various legal actors in government, society, the private sector, and law enforcement agencies as agents with their own objectives.²⁹ Research findings show that MAS can be used to: (1) predict the effectiveness of regulations; (2) identify potential conflicts of interest; (3) measure the level of compliance between actors; (4) determine the Nash equilibrium in law implementation. Thus, MAS is a potential tool for improving the quality of legal evaluation in Indonesia.

7. Future Challenges: Digitalization, Globalization, and Technology Integration Ethics Legality

Indonesia's legal challenges are becoming increasingly complex. Global digitalization is affecting social structures and changing the relationship between society and the state. Modern technological developments have fundamentally changed the form, system, and mechanisms of law.³⁰ Research has identified several key challenges: (1) the acceleration of technological innovation that outpaces the speed of legislation; (2) the need to harmonize national laws with international standards; (3) the potential for misuse of personal data; (4) the need for new legal ethics in the digital space; (5) the integration of Sharia concepts into the global digital economy. The research results confirm that without rapid adaptation, the law will lag behind technological innovation and be unable to provide legal certainty and protection for society..

Discussion

This research discussion confirms that legal changes in Indonesia are an inevitability that cannot be separated from the development of the times, social changes, technological dynamics, and emergency conditions that significantly change people's lifestyles. The interaction between these factors creates new regulatory needs and requires the law to adapt quickly, systematically, and based on public interest. The following analysis provides a more in-depth explanation of the seven main findings in the research results study.

²⁹ A. A. Mamedov et al., "Analysis of the Principle of Multiagent System Functioning in Assessing the Effectiveness of Regulatory Legal Acts," 2020, <https://doi.org/10.2991/aer.k.200202.037>.

³⁰ Nizhnik et al., "State and Law: Transformation Vectors in Modern Conditions."

Legal changes influenced by developments in digital technology show that the law is undergoing a paradigm shift from traditional models to digital regulatory models. Digital transformation has changed almost every aspect of human life, from the economy, communication, and education to public services. Activities that were previously physical have now become virtual, giving rise to various forms of legal actions or violations that were previously unknown. Phenomena such as phishing, data breaches, digital identity theft, and the dissemination of illegal content are clear evidence that the law must respond responsively. The digital era has given rise to cybercrime, which threatens the social order, making legal reform an urgent necessity.³¹ The theory of change in Islamic law states that the law changes in accordance with changes in *illat*. Thus, the emergence of the "digital reality" has become a new *illat* that demands the simultaneous adaptation of national law and Islamic law. This change is also seen as an effort to maintain *ḥifẓ al-ʿaql* and *ḥifẓ al-māl* in *maqāṣid al-syarīʿah*, because digital crimes often attack the data and property of the community.³²

Discussions related to spatial factors show that Indonesia's geographical and cultural diversity has significant implications for the application of law. Indonesia, as a multicultural country, consists of various ethnicities, languages, cultures, and customs. The application of Islamic law is never separated from the spatial context that shapes people's behavior. For example, family law practices in Indonesia, as formulated in the KHI, are adapted to local cultures that differ from those in Middle Eastern countries. This is not a form of deviation, but rather an adaptive necessity to ensure that the law can be effectively implemented. The implementation of Sharia law in Aceh, for example, reflects local characteristics that are different from those in Bali, Papua, or other regions. From a *maqāṣid* perspective, spatial diversity is part of the effort to achieve local benefits that cannot be generalized. Thus, spatial diversity provides evidence that the Indonesian legal system must be flexible and layered, following the diversity of the community context.³³

The COVID-19 pandemic is clear evidence that circumstantial changes directly influence legal changes. The pandemic situation has placed society in a state of health emergency that requires extraordinary legal intervention. In the context of Islam, this emergency situation can be categorized as *ḥālah al-ḍarūrah*, which allows for the enforcement of special rules in order to protect life (*ḥifẓ al-nafs*). Research findings clarify that the government issued new regulations such as PSBB, PPKM, and telemedicine policies because the pattern of the pandemic's spread was exponential and difficult to predict. Complex phenomena such as pandemics require adaptive, rapid legal responses that are capable of adjusting to changing conditions on the ground. With the digitization of health documents, digital tracking systems, and digital vaccine certificates, the law has moved from the normative level to the technological level. This shows that in emergencies, Islamic law and state law are equally oriented towards the protection of life and public interest.³⁴

The discussion on fintech transformation shows significant changes in the financial service system. Fintech not only speeds up transactions, but also changes consumption patterns, economic lifestyles, and community interactions with financial institutions. However, this development also carries risks such as unclear digital contracts, the potential for application-based fraud, weak data security, and minimal control by financial authorities over virtual transactions. Fintech has the potential to shift the role of traditional banks, thus requiring

³¹ Rosman, "The Urgency of Digitizing Islamic Law in the Disturbance 4.0 Era (Normative Studies on Cybercrime)," 2023.

³² Sylvia, "The Theory of Change in Law: Al-Syatibi's Philosophy of Law."

³³ Hosen, "Introduction: Islamic Law in Action," 2018.

³⁴ Malcai and Shur-Ofry, "Using Complexity to Calibrate Legal Response to Covid-19," 2021.

comprehensive regulations that govern consumer protection and digital system security. In Islamic law, fintech issues require new collective *ijtihad* (*ijtihad jama'i*).³⁵ *Ijtihad jama'i* is more relevant because it involves collaboration between experts from various disciplines: scholars, economists, technology experts, digital regulators, and legal academics. In this way, Islamic economic law can respond to fintech developments without being trapped in traditional mindsets.³⁶

Discussions on environmental law show that global ecological changes pose a serious challenge to modern legal systems. Environmental damage such as air pollution, deforestation, climate crisis, and marine pollution have threatened human survival. From an Islamic legal perspective, protecting the environment is part of *ḥifẓ al-naḥs*, *ḥifẓ al-naḥl*, and *ḥifẓ al-māl*. This study confirms that the renewal of environmental law requires the integration of ethics, morality, technology, and modern regulations. The use of technology such as satellites, air quality sensors, and big data in environmental monitoring shows that today's environmental law not only regulates but also predicts damage through scientific data. Legal changes in this area are preventive, not just reactive.

The effectiveness of laws is influenced by the interaction of various actors in society who work within complex systems. Multi-agent system (MAS) models enable more accurate assessments of how laws work in practice. MAS models the behavior of actors such as the government, the public, industry players, law enforcement, and civil society organizations. Using mathematical and computational analysis, policymakers can see potential conflicts of interest, power imbalances, and the impact of regulations on various parties. These findings show that legal reform cannot be based solely on changes to the text, but requires a multidimensional analysis of the social dynamics that influence the effectiveness of regulations.³⁷

Future challenges show that Indonesian law must move forward in line with global developments. Technological developments such as artificial intelligence, big data, blockchain, and robotics are changing the structure of modern society. Therefore, Indonesian law must build a regulatory foundation that is adaptive, responsive, and oriented towards public interest. The main challenge is not only outdated regulations, but also a lack of institutional readiness and human resources. Thus, the integration of technology, ethics, and law must be strengthened so that the Indonesian legal system remains relevant and capable of responding to future needs.³⁸

Overall, this discussion shows that legal change in Indonesia is a multidimensional process involving social, technological, theological, and ecological aspects. Both Islamic legal change theory and modern legal theory emphasize that law must keep pace with changes in time, circumstances, and space. Thus, the law in Indonesia must continue to be updated to ensure that it can protect society, create justice, and bring about benefits amid increasingly complex challenges.

4. CONCLUSION

³⁵ Darvishi, Liu, and Lim, "Navigating the Nexus: Legal and Economic Implications of Emerging Tech-Nologies."

³⁶ Pauzi, Hipni, and Radiamoda, "The Importance of the *Ijtihad Jama'i* Method in Contemporary Fiqh Formulations."

³⁷ Mamedov et al., "Analysis of the Principle of Multiagent System Functioning in Assessing the Effectiveness of Regulatory Legal Acts," 2020.

³⁸ Nizhnik et al., "State and Law: Transformation Vectors in Modern Conditions."

This study aims to examine how the Indonesian legal framework adapts to the dynamics of the digital era and the pandemic situation through the integration of the concept of legal change in Islamic tradition and the modern legal framework. Based on the analysis conducted, several important findings were obtained. First, the thoughts of al-Syatibi, maqāṣid al-syarī'ah, and the practice of ijtihad jama'i show that Islamic law has sufficient flexibility to respond to the challenges of the times, including issues of fintech, digitization of services, and public health policy. Second, developments in technology and the digital economy have given rise to new forms of crime and transactions that require regulatory updates, while the COVID-19 pandemic has demonstrated the need for a rapid, proportionate, and evidence-based legal response to protect public safety. Significantly, this research contributes to the understanding that legal reform in Indonesia can only be effective if it combines the principles of Sharia law, a modern scientific approach, and regulatory designs that are responsive to social change. This approach enriches the discourse on legal reform and helps build a legal model that is more adaptive, inclusive, and in line with global technological developments. However, this study has limitations in terms of the scope of empirical data, which relies on documents and literature studies, and therefore needs to be reinforced with more extensive field research. Future research could focus on analyzing the concrete implementation of digital policies, measuring the effectiveness of regulations through multi-agent system modeling, and conducting in-depth studies on the harmonization of national laws and sharia principles in the digital finance sector. The findings of this study also have practical implications, particularly for policymakers, digital regulators, financial institutions, and the health sector, which require an adaptive legal framework to anticipate future technological risks and emergency situations. Thus, this study emphasizes that legal reform in Indonesia must move towards a more flexible, collaborative, evidence-based model, while adhering to the values of public interest and constitutional principles as the main foundation of national legal development.

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