

# A Digital Business Legal Regulation Model to Create a Safe and Sustainable Digital Ecosystem

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## Article Info

### Article history:

Submission March 11, 2026

Revised March 11, 2026

Accepted March 12, 2026

Published March 13, 2026

### Keywords:

Legal Regulation

Digital Business

Digital Ecosystem

Governance

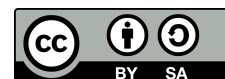
Sustainability



## ABSTRACT

The development of digital economic transformation has driven the emergence of various platform-based business models that present significant opportunities for economic growth, but on the other hand, also raises various legal challenges related to consumer protection, data security, and regulatory certainty in the digital ecosystem. **This research aims** to analyze the dynamics of digital business legal regulations and identify the need to develop an adaptive regulatory model to support the creation of a safe and sustainable digital ecosystem in Indonesia. On the research used in this study is qualitative approach with normative analysis of various laws and regulations, government policies, as well as academic literature relevant to digital business governance. Research shows that although Indonesia already has a number of regulations governing digital business activities, in areas such as personal data protection and electronic transactions, there are still gaps in regulation and institutional coordination that could potentially pose legal risks for both businesses and consumers. Therefore, **this study proposes** a digital business legal regulation model that emphasizes the integration of the principles of legal compliance, consumer protection, platform transparency, and strengthening digital governance based on collaboration between the government, businesses, and the public. **This study confirms** that developing a comprehensive and adaptive regulatory model is crucial to strengthening public trust, increasing legal certainty, and encouraging the creation of a safe, inclusive, and sustainable digital business ecosystem in the era of digital economic transformation.

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DOI: <https://doi.org/10.34306/law.v1i1.63>

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## 1. INTRODUCTION

Digital transformation has significantly changed the patterns of economic, social, and business interactions in various countries, including Indonesia. In this regard, the study is positioned within the broader scholarly discourse on digital governance, technology policy, and legal adaptation for emerging technologies, particularly in response to the regulatory challenges arising in rapidly evolving digital ecosystems [1]. Developments in information technology, the internet, and digital platforms have driven the emergence of various new

business models such as e-commerce, fintech, social commerce, and digital application-based services, which increasingly dominate modern economic activity. The digital business ecosystem not only provides significant opportunities for national economic growth but also opens broader market access for business actors, including Micro, Small, and Medium Enterprises (MSMEs) [2]. The Indonesian government is actively promoting the development of the digital economy as a key strategy for strengthening national competitiveness in the era of globalization [3, 4]. However, behind this rapid growth, the development of digital business also presents various new challenges related to legal aspects, governance, data security, and consumer protection. The cross-border, platform-based nature of digital business activities, which are highly dependent on data processing, creates regulatory complexity that cannot always be effectively addressed by conventional legal frameworks [5].

Therefore, the need for adaptive, comprehensive, and responsive digital business legal regulations is increasingly crucial to ensure that the development of the digital ecosystem continues to proceed safely, transparently, and sustainably. Although the government has issued various regulations to regulate digital activities, such as regulations regarding electronic transactions, personal data protection, and policies related to the digital economy, the implementation of these regulations still faces various challenges in practice [6]. One major challenge is the lack of synchronization between regulations governing various digital business sectors, such as e-commerce, fintech, and other digital platform services. Furthermore, rapid technological developments often outpace the ability of existing regulations to adapt to the dynamics of digital innovation. This has the potential to give rise to various legal risks, such as misuse of personal data, non-transparent business practices, and weak consumer protection mechanisms in the digital environment [7, 8, 9]. Another challenge is the suboptimal coordination between regulatory institutions, business actors, and other stakeholders in building integrated digital ecosystem governance. This situation indicates that a sectoral and partial regulatory approach is not fully capable of addressing the complex needs of digital business governance. Therefore, a more systematic and integrated regulatory approach is needed through the development of a digital business legal regulation model that can accommodate various interests while ensuring a balance between technological innovation and legal protection [10].

Several previous studies have addressed various aspects of digital business regulation, such as consumer protection in e-commerce, fintech governance, and personal data protection issues in digital platform activities. These studies generally focus on policy analysis or evaluation of specific regulations applicable to the digital sector [11]. However, most studies still examine regulations sectorally, and few have comprehensively examined how a digital business legal regulation model can be designed in an integrated manner to support the sustainability of the digital ecosystem as a whole. Furthermore, there are limitations in previous studies, which tend to only highlight the normative aspects of regulation without integrating the digital governance dimension involving various stakeholders. Another limitation is the limited number of studies attempting to develop a conceptual framework or regulatory model that can serve as a reference in formulating digital business legal policies that are more adaptive to technological developments [12, 13]. Thus, a research gap remains regarding the need to develop a digital business legal regulation model that comprehensively integrates aspects of legal certainty, consumer protection, data security, and digital platform governance [14].

Based on this description, this study seeks to fill this research gap by developing a more comprehensive analysis of a digital business legal regulatory model that can support the creation of a safe and sustainable digital ecosystem. Unlike previous studies that focused more on policy analysis or sectoral regulatory evaluation, this study focuses on developing a regulatory model that more systematically integrates various aspects of legal governance within the digital business ecosystem [15]. In response to the need for major revision, the manuscript has been strengthened by emphasizing the analytical basis of the proposed framework, clarifying its novelty in comparison with prior regulatory studies, and positioning the discussion more explicitly within contemporary debates on digital governance, institutional adaptation, and emerging technology regulation. The novelty of this study lies in its integrated regulatory framework that combines legal protection, digital platform governance, and regulatory oversight into a unified model [16, 17]. In contrast to earlier studies that generally examined these elements separately, the proposed model offers a more comprehensive and adaptive approach for addressing regulatory fragmentation, institutional overlap, and the evolving risks of the digital business environment. This study also has limitations in that it focuses on analyzing digital business legal regulations in Indonesia using a normative and conceptual approach, thus not directly examining empirical implementation across all existing digital platform sectors [18]. Nevertheless, this approach is expected to provide a conceptual contribution to the development of a digital business legal regulatory framework that is more adaptive to

the dynamics of digital economic transformation. To strengthen its analytical value, the study also highlights the relevance of comparative legal analysis and the examination of digital regulatory practices in other jurisdictions as important references for refining a more robust and scientifically grounded regulatory model. The article structure in this study is structured as follows, the introduction explains the research background, regulatory challenges, research gaps, and research objectives, the research methods section describes the analytical approach and techniques used, the results and discussion section presents an analysis of the dynamics of digital business regulation and the development of the proposed regulatory model, and the conclusion section summarizes the main findings of the study and provides recommendations for the development of future digital business legal policy [19, 20].

## 2. LITERATURE REVIEW

This chapter outlines the conceptual foundation and literature review relevant to research on digital business legal regulatory models for realizing a safe and sustainable digital ecosystem. Literature reviews play a crucial role in academic research because they provide a theoretical basis for understanding the phenomenon under study and strengthen the analytical framework used in the research. Through literature reviews, researchers can identify conceptual developments, regulatory approaches, and the dynamics occurring within the digital business ecosystem [21]. Furthermore, literature reviews also help identify research gaps that require further study, enabling the research to provide a clearer scientific contribution. Therefore, this chapter will discuss several key aspects related to the concept of digital business law, digital platform regulation and governance, consumer protection and data security in digital business activities, previous research relevant to the topic of study, and the relationship between digital business development and the Sustainable Development Goals (SDGs).

### 2.1. Legal Concepts in the Digital Business Ecosystem

The development of information and communication technology has driven significant transformations in various economic sectors, including modern business practices. Digital business refers to economic activities that utilize digital technology as the primary means of carrying out production, distribution, marketing, and transactions between businesses and consumers. The presence of various digital platforms such as e-commerce, digital financial services, and various internet-based applications has created more efficient and flexible patterns of economic interaction [22, 23]. In this context, digital business law plays a crucial role in regulating the relationships between the parties involved in these digital economic activities [24].

Digital business law serves not only as a regulatory instrument that provides legal certainty for businesses and consumers, but also as a mechanism that maintains a balance between technological innovation and legal protection. The cross-border and data-driven nature of digital business requires legal regulations to adapt to the highly dynamic nature of technological developments. Without a clear and comprehensive legal framework, digital business development has the potential to give rise to various problems such as legal uncertainty, misuse of personal data, and non-transparent business practices. Therefore, developing a digital business legal concept is a crucial aspect in creating a safer and more sustainable digital economic ecosystem [25].

### 2.2. Regulation and Governance of Digital Platforms

Digital platforms are a key element in the digital business ecosystem, acting as intermediaries between businesses and consumers. Platform-based business models enable faster and more efficient economic interactions through the use of digital technology. Digital platforms also enable the integration of various services into a single, online system, making it easier for users to conduct various economic activities such as trade transactions, digital payments, and service bookings [26, 27, 28].

However, the existence of digital platforms also poses important regulatory and governance challenges that require more than descriptive legal observation. The concentration of user data, control over digital infrastructure, and asymmetric market power place platform providers in a dominant position that may weaken accountability and user protection [29]. From a regulatory perspective, this indicates that digital platform governance should not only establish general compliance standards, but also address structural imbalances through clearer transparency obligations, enforceable accountability mechanisms, and stronger institutional supervision. Therefore, a well-defined regulatory framework is essential to ensure that digital business activities operate fairly, safely, and sustainably [30].

### 2.3. Consumer Protection and Data Security in Digital Business

In the digital economy era, data has become a strategic asset for businesses and digital service providers. Digital business activities generally involve the collection and processing of vast amounts of user data, ranging from identity information and consumption patterns to financial transaction data. Therefore, the issue of personal data protection and information security is a crucial aspect of digital business legal regulation.

The risks of data breaches, misuse of personal information, and cyberattacks are some of the challenges that frequently arise in the digital ecosystem. If not properly regulated, these conditions can harm consumers and undermine public trust in digital services. Therefore, regulations governing consumer protection and data security are crucial for maintaining the stability of the digital business ecosystem. Clear regulations not only protect consumers but also increase public trust in the use of digital technology in various economic activities [31].

### 2.4. Previous Research on Digital Business Regulation

Numerous studies have been conducted on digital business regulations in various previous studies, particularly those related to consumer protection, personal data security, and digital platform governance. These studies generally highlight how developments in digital technology influence the legal systems and policies governing technology-based economic activities [32, 33]. Furthermore, several studies have emphasized the importance of the government's role in creating a regulatory framework that balances technological innovation and legal protection. To provide a more systematic overview of previous research relevant to this research topic, the following is a summary of several research focuses related to digital business regulation.

Table 1. Summary of Previous Research Studies

| Study Focus                 | Year | Key Findings   |
|-----------------------------|------|--|
| E-commerce regulations      | 2023 | Harmonization of regulations between digital sectors is needed |
| Personal data protection    | 2023 | Data protection increases user trust                           |
| Digital platform governance | 2024 | Adaptive regulation is needed to keep pace with innovation     |
| Digital economic ecosystem  | 2024 | Collaboration between regulators and industry is essential     |
| Digital data security       | 2023 | Data protection systems are a key factor in trust              |

Table 1 shows that most previous research has focused on specific aspects of digital business, such as data protection, e-commerce regulations, and digital platform governance. However, studies specifically addressing the development of an integrated legal regulatory model for digital business are still relatively limited. Therefore, this study seeks to contribute by examining the development of a more comprehensive legal regulatory model for digital business to support the creation of a secure and sustainable digital ecosystem.

### 2.5. Digital Business and the Sustainable Development Goals (SDGs)

The development of digital business is closely linked to sustainable development efforts, which have become a global agenda through the SDGs. The SDGs are a global development framework comprising various objectives designed to improve public welfare, promote inclusive economic growth, and maintain environmental sustainability. In the context of the digital economy, technological developments and digital innovation can make a significant contribution to achieving several SDGs, particularly those related to economic growth, industrial innovation, and strengthening effective and accountable institutions [34].

Digital businesses supported by a clear and transparent regulatory framework can foster a more inclusive economic ecosystem and provide broader public access to various digital services. Furthermore, effective digital business legal regulations can help minimize various risks arising from digital economic activities, such as misuse of personal data and unfair business practices [35]. Including AI governance in automated decision-making systems, digital human rights related to privacy and data sovereignty, and the potential use of blockchain-based mechanisms for dispute resolution and regulatory compliance in cross-border digital transactions. Therefore, developing an adaptive and sustainable digital business legal regulatory model can be a crucial strategy in supporting the implementation of sustainable development principles in the era of digital transformation [36].



Figure 1. Sustainable Development Goals (SDGs)

Figure 1 shows the link between digital business development and several key objectives in the SDGs, particularly SDG 8, SDG 9, and SDG 16. SDG 8 emphasizes the importance of promoting inclusive and sustainable economic growth through the creation of productive jobs, where digital business development can open up new economic opportunities for businesses and communities. Furthermore, SDG 9 relates to the development of sustainable industry, innovation, and infrastructure, which in the context of the digital economy is reflected through the use of information technology and the development of digital platforms as drivers of industrial transformation. Meanwhile, SDG 16 highlights the importance of strong, transparent, and accountable institutions in supporting a fair governance system, including in regulating digital business activities through a clear legal regulatory framework. Therefore, the development of a comprehensive digital business legal regulatory model not only plays a role in creating a safe and sustainable digital ecosystem but also contributes to the achievement of sustainable development goals at the national and global levels.

### 3. RESEARCH METHODS

This chapter explains the methodological approach used in research on the legal regulatory model for digital business to create a safe and sustainable digital ecosystem. Research methods play a crucial role in determining how researchers collect, analyze, and interpret data related to the phenomenon under study. In the context of digital business law research, an appropriate methodological approach is necessary to understand the dynamics of regulation, digital platform governance, and the legal implications that arise in the development of the digital economy [37]. Therefore, this research uses a qualitative approach with a focus on conceptual and normative analysis of various regulations, academic literature, and policies related to digital business. This approach was chosen because it provides a deeper understanding of legal phenomena in the digital ecosystem and allows researchers to examine the relationship between regulation, digital governance, and the sustainability of the digital business ecosystem more comprehensively [38, 39].

#### 3.1. Research Approach

This research uses a qualitative approach to gain a deeper understanding of the phenomenon of digital business legal regulation through analysis of various relevant data sources. A qualitative approach allows researchers to examine social and legal phenomena contextually, thus providing a more comprehensive understanding of regulatory dynamics within the digital business ecosystem [40]. In this study, a qualitative approach was used to analyze various policies, regulations, and legal concepts related to digital business activities. This approach also enabled researchers to identify various challenges faced in implementing digital regulations, including issues of consumer protection, personal data security, and digital platform governance. Therefore, a qualitative approach is considered the most relevant method for examining the development of an adaptive and sustainable legal regulatory model for digital business. Furthermore, this research employs a normative approach, focusing on analyzing legislation, legal doctrine, and public policies related to digital business regulation. This approach aims to understand how the legal system regulates digital economic activity and how these regulations can be developed to create a safer and more sustainable digital ecosystem [41].

#### 3.2. Types and Sources of Data

This study uses qualitative data obtained from various sources relevant to the research topic. The data used in this study consists of primary and secondary data obtained through literature studies and analysis of legal documents related to digital business. The primary data in this study consists of various regulations and policies governing digital business activities, including laws and regulations related to electronic transactions, personal data protection, and digital platform governance [42]. Meanwhile, secondary data was obtained from various academic literature sources, such as scientific journals, books, research reports, and publications from international institutions discussing developments in the digital economy and technology regulation. The use

of various data sources aims to provide a more comprehensive picture of the dynamics of digital business legal regulations and to strengthen the analysis conducted in this study [43, 44, 45].

Table 2. Types and Sources of Research Data

| Data Types   | Data source           | Information   |
|--------------|-----------------------|---|
| Data Primer  | Legislation           | Regulations related to digital business and data protection |
| Data Seconds | Scientific journal    | Academic articles on digital business law                   |
| Data Seconds | Books and literature  | Theoretical concepts and academic studies                   |
| Data Seconds | Institutional reports | Reports on developments in the digital economy              |

Table 2 shows that this study utilizes multiple complementary data sources to provide a more comprehensive understanding of digital business legal regulations. Primary data provides the basis for analysis of the applicable legal framework, while secondary data serves to strengthen the theoretical foundation and provide an academic perspective on digital business development [46].

### 3.3. Data Collection Techniques

The data collection techniques in this research were literature review and document analysis. The literature review was conducted by examining various scientific sources related to the concept of digital business law, digital platform regulation, and digital economy ecosystem governance. This method enabled researchers to gain a deep understanding of the development of theories and concepts relevant to the research topic. Furthermore, document analysis is also used to examine various regulations and policies related to digital business activities. Document analysis is conducted by examining the contents of laws and regulations, government policies, and institutional reports that discuss digital economic regulation. Through document analysis, researchers can identify various regulatory aspects relevant to the development of digital business legal models [47].

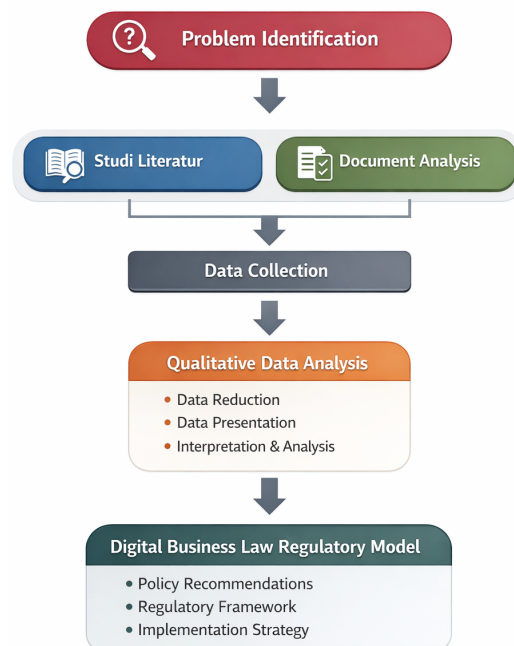


Figure 2. Digital Business Legal Research Process Framework

Figure 2 shows the research process framework used to examine the legal regulatory model for digital business to create a secure and sustainable digital ecosystem. The research process begins with the problem identification stage, which examines various legal issues that arise in digital business practices, such as data protection, electronic transaction security, and digital platform compliance with applicable regulations. The next stage is a literature study and document analysis, which are conducted to examine various scientific sources,

regulations, and policies related to digital business law to obtain a strong theoretical and normative foundation. The research then continues with the data collection stage, through the analysis of legal documents, policy reports, and various information sources relevant to the development of the digital business ecosystem [48, 49]. The collected data is then analyzed using qualitative data analysis, which includes data reduction, data presentation, and interpretation of research findings. The final stage of this research framework is the development of a legal regulatory model for digital business, containing policy recommendations, a regulatory framework, and implementation strategies that can support the creation of safer, more transparent, and more sustainable digital business governance. With this process framework, this research is expected to produce a conceptual contribution to the development of a legal regulatory model that is adaptive to the dynamics of digital transformation [50, 51].

### 3.4. Data Analysis Techniques

The data analysis in this study was conducted using qualitative analysis methods aimed at interpreting data obtained from various research sources. The analysis process involved several stages: data reduction, data presentation, and drawing conclusions. In the data reduction stage, researchers select and simplify various pieces of information obtained from research data sources. This process aims to identify the information most relevant to the research focus. Next, in the data presentation stage, the analyzed information is systematically organized to provide a clear picture of the dynamics of digital business legal regulation. The final stage is drawing conclusions, which is done by interpreting the results of the data analysis to produce research findings relevant to the research objectives. This analysis process allows researchers to identify various regulatory challenges and formulate a digital business legal regulation model that is more adaptive to technological developments.

Table 3. Stages of Research Data Analysis

| Analysis Stages     | Description  |
|---------------------|--|
| Data Reduction      | Selecting and simplifying relevant data              |
| Data Presentation   | Arrange data systematically to facilitate analysis   |
| Data Interpretation | Examining the meaning and relationships between data |
| Drawing Conclusions | Formulating research findings and regulatory models  |

Table 3 shows that the data analysis process was conducted in a step-by-step and systematic manner to ensure that the research results have a strong analytical basis. By using qualitative analysis methods, this research is expected to yield a deeper understanding of the dynamics of digital business legal regulation and provide conceptual contributions to the development of regulatory models that can support the creation of a safe and sustainable digital ecosystem.

## 4. RESULTS AND DISCUSSION

This chapter presents research findings obtained through a qualitative approach utilizing legal document analysis techniques, literature studies, and interpretations of various policies related to digital business development. The research findings focus on identifying regulatory challenges within the digital business ecosystem, analyzing existing policy gaps, and formulating a legal regulatory model that can support the creation of a safe and sustainable digital ecosystem [52]. The discussion in this chapter also integrates the research findings with the theoretical framework outlined in the previous section, resulting in a comprehensive understanding of legal governance in the digital business sector.

### 4.1. Dynamics of Digital Business Ecosystem Development

The development of digital businesses in recent years has shown significant growth in line with the rapid transformation of information and communication technology. Digital platforms such as e-commerce, fintech, and various app-based services have become a crucial part of modern economic activity. This transformation not only creates new economic opportunities but also presents regulatory challenges, particularly regarding consumer protection, electronic transaction security, and personal data management. Document analysis shows that the development of the digital business ecosystem tends to outpace the regulatory environment's ability to adapt to these changes. This situation has given rise to various potential legal risks, such as misuse of personal

data, digital monopolistic practices, and legal uncertainty in resolving digital transaction disputes. Furthermore, the public's increasing dependence on digital platforms also demands more transparent and accountable governance mechanisms. In this context, legal regulations play a strategic role in creating a balance between technological innovation and protecting the public interest. Adaptive and responsive regulations to technological developments are key factors in maintaining the stability of the digital business ecosystem. Therefore, a regulatory approach is needed that is not merely reactive but also proactive in anticipating the various potential risks that arise in digital economic activities.

#### 4.2. Regulatory Gap Analysis in Digital Business

Research results show that one of the main challenges in developing a digital business ecosystem is the persistent regulatory gap in various legal aspects. This gap arises because digital technology develops more rapidly than the legal framework governing digital activities, creating difficulties in ensuring that regulations remain relevant and effective. Several existing regulations already provide a legal basis for electronic transactions and personal data protection. However, their implementation still faces important obstacles, such as limited oversight, weak coordination among institutions, and low levels of compliance among some digital business actors. Furthermore, the analysis shows that existing regulations remain sectoral and are not yet fully integrated into a comprehensive policy framework. This condition has led to overlapping authority among institutions responsible for supervising digital business activities and has increased the risk of inconsistent enforcement. As a result, legal uncertainty may arise for both businesses and users of digital services. These findings demonstrate the need for a more integrated regulatory approach based on sound digital governance principles. Effective regulation must not only provide legal certainty, but also support technological innovation and create a competitive and sustainable digital business environment.

#### 4.3. Legal Regulatory Model for Digital Business Ecosystem

Based on the analysis, this study proposes a digital business legal regulation model that focuses on three main dimensions: legal protection, digital platform governance, and strengthening oversight institutions. This model is designed to address various regulatory challenges emerging in the digital business ecosystem and support the creation of a governance system that is more adaptive to technological developments. The proposed regulatory model emphasizes the importance of integrating legal policy, technological innovation, and multi-stakeholder participation in the decision-making process. This approach allows for regulations that are more responsive to digital market dynamics while providing adequate protection for consumers and businesses. Furthermore, this model highlights the importance of collaboration between the government, the private sector, and the public in building a sustainable digital ecosystem. This collaboration can be achieved through the development of technology-based oversight mechanisms, increased transparency in digital platform management, and strengthening the capacity of institutions responsible for overseeing digital business activities.

Table 4. Main Components of the Digital Business Legal Regulation Model

| Regulatory Components                 | Policy Focus  | Implementation Objectives                 |
|---------------------------------------|---|---|
| Data and Consumer Protection          | Personal data security and transaction transparency | Increase user trust                       |
| Digital Platform Governance           | Operational standards and legal compliance          | Prevent unfair business practices         |
| Supervision and Law Enforcement       | Inter-agency coordination and oversight mechanisms  | Creating legal certainty                  |
| Innovation and Digital Transformation | Support for technology and innovation               | Driving the growth of the digital economy |

Table 4 shows the main components of the digital business legal regulation model resulting from this research. Each component reflects a critical aspect of digital ecosystem governance, from consumer protection to strengthening oversight mechanisms. Integration between these components is expected to create a more effective regulatory system in addressing the challenges of digital economic development.

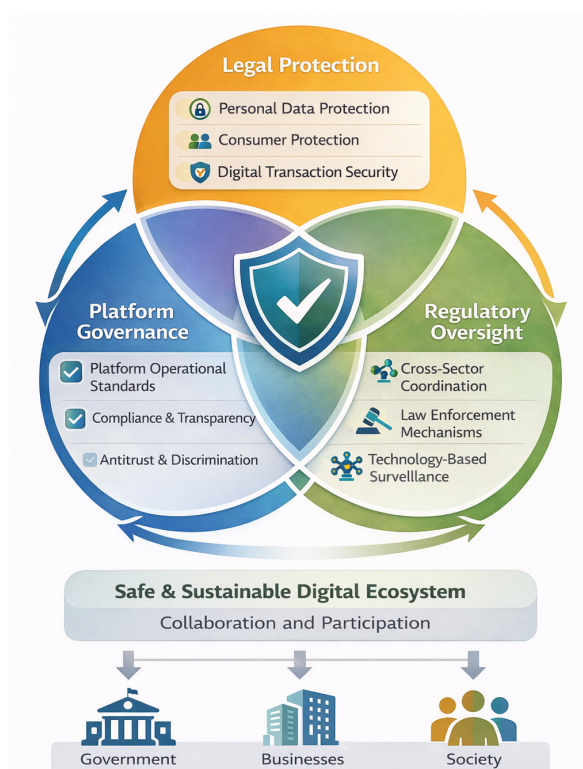


Figure 3. Sustainable Digital Business Legal Regulation Model

Figure 3 illustrates a sustainable digital business legal regulation model built on three main pillars: legal protection, digital platform governance, and regulatory oversight. The legal protection pillar emphasizes the importance of ensuring user security through personal data protection, consumer protection, and security in digital transactions. The platform governance pillar focuses on implementing clear operational standards, increasing compliance and transparency of digital platforms, and preventing monopolistic or discriminatory practices in the digital ecosystem. Meanwhile, the regulatory oversight pillar emphasizes the importance of cross-sector coordination between institutions, effective law enforcement mechanisms, and the implementation of technology-based oversight systems to ensure compliance with applicable regulations. These three pillars are integrated and form the foundation for creating a safe and sustainable digital ecosystem through collaboration between the government, businesses, and the public as key stakeholders in the development of the digital economy.

#### 4.4. Regulatory Implications for the Security and Sustainability of Digital Ecosystems

The effective implementation of legal regulations has significant implications for the security and sustainability of the digital business ecosystem. Clear, consistent, and enforceable regulations can increase public trust in digital platforms, reduce uncertainty in digital transactions, and encourage technology-based economic growth in a more stable and accountable manner. The research findings show that adaptive regulations serve not only as a control instrument, but also as a strategic mechanism to encourage responsible innovation and ensure that technological development remains aligned with legal and ethical standards. In this context, regulations must be designed with an appropriate balance between legal protection and regulatory flexibility, so that businesses can develop new technologies without neglecting consumer rights, data security, and fair digital practices. Furthermore, strengthening the capacity of supervisory institutions is also a crucial factor in ensuring effective regulatory implementation. Institutions with adequate resources, clear authority, and support from technology-based supervisory systems will be better able to monitor compliance, respond to emerging risks, and enforce legal standards more effectively. This condition is important not only for maintaining order in digital business activities, but also for creating a digital ecosystem that is trustworthy, resilient, and sustainable in the long term.



Figure 4. Integration of Regulation and Governance of Digital Ecosystem

Figure 4 illustrates the integration of regulatory policy, technological innovation, and digital economic sustainability in building a stable and sustainable digital ecosystem. Regulatory policy serves as the legal basis for regulating digital business activities through consumer and personal data protection and the implementation of legal compliance standards for digital businesses. Meanwhile, technological innovation is a crucial factor driving the development of the digital ecosystem through the development of new technologies, research and collaboration activities, and the ability to adapt to changing digital market trends. Meanwhile, digital economic sustainability emphasizes the importance of innovation-based economic growth and the creation of a business ecosystem that is capable of long-term sustainability. These three elements interact and form a mutually supportive relationship, allowing the integration of regulation, governance, and technological innovation to create a more stable and secure digital ecosystem that can drive sustainable digital economic growth.

## 5. MANAGERIAL IMPLICATIONS

The findings of this study provide several important managerial implications for stakeholders involved in the digital business ecosystem, particularly government institutions, digital platform managers, business actors, and regulatory authorities. First, digital platform managers must recognize that regulatory compliance is no longer simply a legal obligation, but also a strategic factor in building long-term trust, reputation, and business sustainability. This means that companies should integrate personal data protection, consumer protection, and transaction security into their core operational systems rather than treating them as secondary administrative requirements. Second, business leaders should adopt a proactive governance approach by developing internal compliance mechanisms, transparency standards, and digital risk management procedures that are aligned with evolving legal and technological changes. Such measures can reduce legal uncertainty, strengthen accountability, and improve the resilience of digital business operations in increasingly complex market environments.

Furthermore, the study implies that policymakers and regulators should move beyond fragmented sectoral regulations and adopt a more integrated governance model that promotes coordination between institutions. From a managerial perspective, this requires the establishment of collaborative frameworks among public institutions, private sector actors, and civil society to improve regulatory implementation and oversight effectiveness. Strengthening supervisory institutions through digital monitoring tools, inter-agency coordination systems, and technology-based compliance mechanisms is also essential for improving enforcement capacity. For business managers, these conditions highlight the importance of maintaining adaptive strategies that balance innovation with legal responsibility. In practical terms, managers should invest in compliance capacity, legal awareness, digital governance training, and technology-based monitoring systems to ensure that innovation remains sustainable, competitive, and aligned with the broader objective of creating a safe and sustainable digital ecosystem.

## 6. CONCLUSION


This study aims to analyze the regulatory dynamics within the digital business ecosystem and formulate a legal regulatory model capable of supporting the creation of a secure and sustainable digital ecosystem. Based on the results of the analysis conducted through a qualitative approach through literature review and policy document analysis, this study found that the very rapid development of digital business has not been fully balanced by a comprehensive and integrated regulatory framework. This condition has given rise to various legal challenges, such as personal data protection, digital transaction security, and suboptimal digital platform governance. Therefore, this study produces a digital business legal regulatory model that emphasizes the integration of legal protection, digital platform governance, and regulatory oversight as three main pillars in creating a digital governance system that is more adaptive to technological developments. The resulting model demonstrates that collaboration between the government, business actors, and the community is a crucial factor in building a secure, transparent, and sustainable digital ecosystem.


Furthermore, this study also answers the research question regarding how legal regulations can play a role in supporting the sustainability of the digital business ecosystem. The results show that effective regulations must be able to accommodate technological developments while providing legal certainty for business actors and protection for digital service users. The integration of regulatory policies, technological innovation, and good governance is a crucial factor in building a stable digital economic system. However, this study still has several limitations, particularly in terms of the scope of the analysis, which focuses more on conceptual studies and analysis of policy documents without directly involving empirical data from industry players or stakeholders. Furthermore, the very rapid dynamics of digital technology development also poses a challenge in formulating a regulatory model that is truly adaptive to long-term changes.

Based on these limitations, further research is expected to develop a more comprehensive study involving empirical approaches, such as interviews with regulators, digital industry players, and digital platform users to obtain a more in-depth picture of regulatory implementation in the field. Future research can also explore the comparison of digital business regulatory policies across countries as a reference in developing a more effective and adaptive regulatory framework. Furthermore, further research can focus on developing more innovative digital governance models by utilizing technologies such as artificial intelligence and data-driven monitoring systems to improve regulatory effectiveness. With this research development, it is hoped that studies on digital business law can make a broader contribution to supporting the development of an inclusive, safe, and sustainable digital economy ecosystem in the future.


## 7. DECLARATIONS

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### 7.2. Author Contributions

Conceptualization: DD; Methodology: SA; Software: RT; Validation: CP and DD; Formal Analysis: SA and RT; Investigation: CP; Resources: DD; Data Curation: SA; Writing Original Draft Preparation: RT and CP; Writing Review and Editing: DD and SA; Visualization: RT; All authors, DD, SA, RT, and CP, have read and agreed to the published version of the manuscript.

### 7.3. Data Availability Statement

The data presented in this study are available on request from the corresponding author.

### 7.4. Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

### 7.5. Institutional Review Board Statement

Not applicable.

### 7.6. Informed Consent Statement

Not applicable.

### 7.7. Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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