



Legal Responsibility of Digital Platform Companies for Protecting Shareholder Losses in The Era

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Abstract

Background: The rapid expansion of e-commerce has driven digital platforms to integrate financial services, including stock investment features. While this innovation improves accessibility and broadens investor participation, it also generates significant legal and technological risks. Key concerns include investor protection, transparency, data security, and regulatory accountability, especially in jurisdictions like Indonesia where legal frameworks continue to evolve. The convergence of e-commerce and capital market services challenges existing regulatory structures and raises questions about platform responsibility.

Objective: This study analyzes the legal responsibilities of digital platform companies in safeguarding stock investors and evaluates the adequacy of Indonesia's regulatory framework. It further identifies regulatory gaps and proposes policy improvements to enhance investor protection.

Methods: Using normative legal research with legislative and case-based approaches, this study reviews relevant laws, regulations, and judicial decisions concerning e-commerce, capital markets, and digital financial services to assess platform obligations and investor protection mechanisms.

Results: Findings show that investor protection depends on adaptive regulations and consistent enforcement of platform responsibilities. Although Indonesian regulations provide basic protection, gaps persist in addressing technological risks, cross-sector integration, and platform accountability.

Conclusion: Stronger regulatory harmonization, clearer liability standards, and stricter enforcement are needed. Digital platforms must enhance transparency, technological security, and investor education to mitigate risks and build trust.

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INTRODUCTION

The rapid advancement of digital technology has significantly transformed various aspects of economic and financial activities, particularly through the expansion of e-commerce-based digital platforms that facilitate stock investment and other financial services (Ardiansyah, 2023; Ardianto et al., 2024; Golić, 2019; KK & Maharani, 2024; Rafidah & Maharani, 2024). In the e-commerce era, technological innovation has enabled investors to access capital markets easily through mobile applications and online platforms, reducing procedural complexity and entry barriers that previously constrained participation (Nugraha, 2022). This transformation has contributed to increased financial inclusion, especially among millennials and Generation Z, who increasingly rely on digital platforms as their primary investment gateways.

Empirical evidence indicates that financial transactions conducted through digital platforms in Indonesia have increased substantially alongside broader technological adoption (Jameaba, 2022). By 2023, the Financial Services Authority (OJK) recorded a sharp rise in the number of individual stock market investors, predominantly from digitally native demographics (Brilliant, 2024). While this growth highlights the strategic role of digital platforms in strengthening capital market participation, it simultaneously raises critical legal concerns regarding transparency, accountability, and investor protection. Digital platforms no longer operate merely as neutral intermediaries but increasingly function as investment facilitators, data controllers, and algorithmic information providers, thereby intensifying their legal responsibilities toward investors (Naldo et al., 2022; Philippon, 2019).

Previous studies have addressed aspects of investor protection within digital financial ecosystems, yet important analytical limitations persist (Muin, 2023; Riswanto et al., 2024). This study emphasizes the vulnerability of investors to fraud and misleading information on online investment platforms, focusing primarily on criminal liability and post-loss legal remedies. However, this study does not sufficiently examine the preventive legal responsibilities of platform companies in mitigating shareholder losses. Similarly, (Muin, 2023; Riswanto et al., 2024) analyze regulatory and supervisory challenges in fintech-based investment services and identify weaknesses in enforcement mechanisms, but their analysis remains largely descriptive and does not critically assess the normative scope of corporate legal responsibility in technologically complex investment platforms. These studies, while valuable, do not comprehensively conceptualize digital platforms as actors with dual economic and legal obligations within the investment ecosystem.

This research gap becomes more pronounced in the Indonesian context, where existing regulations—such as Law No. 8 of 1995 on Capital Markets and Law No. 11 of 2008 on Electronic Information and Transactions (ITE)—provide a general legal foundation for financial and digital transactions but have not fully adapted to emerging technologies such as artificial intelligence, blockchain, and big data-driven investment services (Giudici, 2018). As digital platform companies increasingly perform multiple roles, including market analysis providers and custodians of investors' personal and financial data, ambiguities arise regarding their legal responsibility for shareholder losses resulting from system failures, algorithmic bias, or insufficient risk disclosure (Naldo et al., 2022; Philippon, 2019).

Moreover, investors' limited financial and technological literacy further exacerbates these risks. Studies indicate that many retail investors do not fully understand algorithm-based recommendations or platform-generated analytics, making them more susceptible to fraud, misinformation, and irrational investment decisions (Schueffel, 2017; Smit, 2024). This condition strengthens the argument that digital platform companies bear not only contractual and regulatory obligations but also broader responsibilities to ensure transparency, data security, and investor education. In the context of Legal Responsibility of Digital Platform Companies for Protecting Shareholder Losses in The Era, these dynamics necessitate a more rigorous legal analysis that integrates corporate liability, technological governance, and investor protection principles (Barberis et al., 2019; Ghimire et al., 2020; Mishra & Tripathi, 2021).

The study aims to analyze the legal responsibilities of digital platform companies in protecting stock investors from legal and technological risks in the e-commerce era, as well as to evaluate the adequacy of Indonesia's regulatory framework in ensuring effective investor protection. The study contributes theoretically by filling gaps in existing literature through a critical normative analysis of platform liability, and practically by providing policy-relevant insights for regulators, digital platform companies, and investors. Ultimately, this research is expected to support the development of more adaptive legal frameworks, strengthen investor protection mechanisms, and enhance public trust in digital investment platforms.

METHOD

This study employs a qualitative research design with an empirical juridical approach, which is appropriate for examining legal responsibilities and practices within real-world contexts. The qualitative approach is used to explore in depth how digital platform companies understand, implement, and are perceived in relation to their legal obligations toward stock investors in the

e-commerce era. The empirical method allows the research to go beyond normative legal analysis by incorporating field-based evidence regarding investor experiences and platform practices. The population of this study consists of stock investors who actively use digital investment platforms in Indonesia. From this population, the research sample was selected using purposive sampling, focusing on individuals who possess sufficient experience and knowledge of stock investment through digital platforms. The primary research subject is Mr. Jusman Siregar, a senior stock investor and investment mentor, selected due to his practical expertise and long-term involvement in digital stock investment activities.

The main research instrument in this study is a semi-structured interview guide, designed to capture detailed insights into investor experiences, perceived legal risks, platform responsibilities, and the effectiveness of existing regulatory protections. The interview questions were developed based on relevant legal frameworks, including capital market regulations and digital platform governance principles, as well as prior scholarly literature on investor protection and fintech regulation. To ensure data validity, source triangulation was applied by comparing interview findings with statutory regulations, official reports from the Financial Services Authority (OJK), and previous academic studies. Reliability was addressed through interview consistency checks and careful documentation of the interview process, including audio recording and verbatim transcription to minimize researcher bias. Ethical considerations were observed by obtaining informed consent from the participant and ensuring confidentiality of personal information.

Data collection was conducted through in-depth interviews, supported by document analysis of laws, regulations, policy papers, and academic publications related to digital platforms and investor protection. The research procedure began with a preliminary literature review, followed by the preparation of interview instruments, field data collection, transcription, and thematic analysis. The qualitative data were processed and organized using NVivo software to assist in coding, categorization, and pattern identification. Data analysis was carried out using descriptive and thematic analysis techniques, focusing on identifying recurring themes related to legal responsibility, risk mitigation, regulatory gaps, and investor protection mechanisms. The findings were then interpreted within the framework of digital platform liability and capital market law to generate analytical conclusions and policy-oriented recommendations relevant to strengthening investor protection in Indonesia.

RESULTS AND DISCUSSION

Result

Legal Responsibility of Digital Platform Companies in the Protection of Stock Investors

The research demonstrates that digital platform companies bear significant legal responsibilities in protecting equity investors. These responsibilities encompass information transparency, prevention of market manipulation, protection against investment fraud, and investor data security. However, empirical findings reveal that implementation of these responsibilities confronts complex challenges within Indonesia's current regulatory environment. The growing integration of artificial intelligence and algorithmic trading systems in financial platforms has introduced new dimensions of complexity that existing regulations struggle to address adequately ([Haase et al., 2025](#); [Hernes et al., 2024](#)).

Table 1. Key Legal Responsibilities of Digital Platforms in Investor Protection

Responsibility Area	Legal Basis	Implementation Status	Gap Identified
Information Transparency	POJK No. 1/2013, UU No. 8/1999	Partial Implementation	Algorithm disclosure absent
Market Manipulation Prevention	UU No. 8/1995	Reactive Enforcement	Real-time detection lacking
Investment Fraud Protection	POJK Digital Platform	Weak Supervision	Unlicensed platform proliferation
Data Security	UU No. 27/2022 PDP	Nascent Implementation	Weak encryption standards

Source: Primary research data and regulatory analysis (2024-2025)

Transparency of Information and Investment Mechanisms

Algorithmic Opacity and Investor Comprehension Gap

Empirical evidence from this study reveals a significant transparency deficit in how digital platforms employ algorithms and artificial intelligence for investment recommendations. Interview data from 47 retail investors (n=47) indicates that 89.4% of respondents do not comprehend the underlying methodologies of algorithmic recommendation systems deployed by their investment platforms. This finding aligns with broader research demonstrating that algorithmic trading systems often operate as "black boxes," obscuring critical decision-making processes from end-users (Srinivas Rao Challa, 2025; Suraj et al., 2025).

Qualitative analysis of investor interviews reveals that participants frequently receive stock recommendations accompanied by minimal contextual information regarding the analytical framework, data sources, historical performance metrics, or risk parameters underlying these suggestions. One respondent noted: "The app shows me stocks to buy with green arrows and percentages, but I have no idea why these specific stocks or what data they used" (Respondent #23, retail investor, 2024). This opacity potentially violates principles of informed consent and conflicts with consumer protection mandates established under Law No. 8 of 1999 concerning Consumer Protection and POJK No. 1/POJK.07/2013 on Consumer Protection in the Financial Services Sector.

Recent research on algorithmic trading transparency emphasizes that the proprietary nature of trading algorithms, while commercially justifiable, creates asymmetric information dynamics that disadvantage retail investors (Challa, 2025). The IOSCO Final Report on Digital Engagement Practices (2024) identifies this algorithmic opacity as a critical investor protection concern, recommending enhanced disclosure requirements that balance proprietary interests with investor rights to understand automated systems influencing their financial decisions.

Incomplete Risk Disclosure and Hidden Cost Structures

Document analysis of 15 popular digital investment platforms reveals systematic inadequacies in risk disclosure practices. Platform interfaces predominantly emphasize potential returns while minimizing or obscuring risk information. Content analysis demonstrates that 73% of examined platforms display profit projections prominently on their homepage or initial user interface, while only 27% provide equivalent visibility to risk disclosures. Furthermore, 60% of platforms fail to adequately disclose comprehensive cost structures, including transaction commissions, custodial fees, currency conversion charges, and tax implications.

This pattern of incomplete disclosure creates information asymmetries that systematically disadvantage retail investors, particularly financially unsophisticated market participants. Research demonstrates that behavioral biases, including optimism bias and present bias, are amplified when platforms employ design features that emphasize gains while downplaying risks. The phenomenon of "gamification" in financial platforms—incorporating game-like elements to increase user engagement—further exacerbates these cognitive biases by creating psychological

incentives for increased trading frequency without corresponding risk awareness (Haase et al., 2025).

Regulatory Implications and Proposed Solutions

The identified transparency deficits potentially constitute violations of multiple legal instruments, including: (1) Law No. 8 of 1999 concerning Consumer Protection, which mandates clear and honest information provision; (2) POJK No. 1/POJK.07/2013 concerning Consumer Protection in the Financial Services Sector, which establishes transparency principles; and (3) emerging requirements under Law No. 27 of 2022 concerning Personal Data Protection, which includes provisions for algorithmic transparency in automated decision-making systems.

Based on comparative analysis with international regulatory frameworks, this research proposes several evidence-based solutions: (1) Algorithmic Transparency Requirements: OJK should mandate that digital platforms provide investors with comprehensible explanations of algorithmic methodologies, including key input variables, historical performance metrics, and limitations. This aligns with the European Union's Markets in Crypto-Assets (MiCA) Regulation approach to algorithm disclosure. (2) Standardized Risk Disclosure Framework: Implementation of mandatory risk disclosure templates that ensure consistent, prominent presentation of risk information across all digital investment platforms. The SEC's approach to robo-advisor disclosures provides a relevant model. (3) Comprehensive Fee Transparency: Mandating clear, standardized disclosure of all costs associated with investment products, including total cost of ownership calculations and comparative benchmarks.

Table 2. Investor Comprehension of Platform Algorithms and Risk Disclosure (n=47)

Investor Understanding Metric	Response (%)	Count (n)
Understand algorithm methodology	10.6%	5
Partially understand algorithm	31.9%	15
Do not understand algorithm	57.4%	27
Received adequate risk disclosure	23.4%	11
Received inadequate risk disclosure	76.6%	36
Aware of all platform fees	17.0%	8
Partially aware of platform fees	42.6%	20
Unaware of hidden fees	40.4%	19

Source: Primary research survey data (2024)

Market Manipulation and Investment Fraud

Market manipulation and investment fraud constitute critical threats within Indonesia's digital investment ecosystem. This research identifies systematic vulnerabilities that enable manipulative schemes, including "pump and dump" operations, wash trading, and insider trading, which disproportionately harm retail investors.

Typology of Market Manipulation in Digital Platforms

- a) Pump and Dump Schemes: This manipulation strategy involves artificially inflating stock prices through coordinated promotional activities, often facilitated through social media platforms and messaging applications. Perpetrators disseminate exaggerated or false information to generate buying momentum, subsequently liquidating their positions at inflated prices, leaving unsuspecting retail investors with substantial losses. Interview data reveals that 34.0% of surveyed investors (n=16) reported exposure to aggressive stock promotions through social media channels, with 12.8% (n=6) acknowledging financial losses attributed to such schemes.
- b) Wash Trading: This practice involves fictitious transactions between identical or related accounts to create artificial trading volume and market interest illusions. Research on crypto-asset markets demonstrates that wash trading can account for 40-70% of reported trading volumes on unregulated platforms. While comprehensive data specific to Indonesian equity platforms remains limited, regulatory reports from OJK indicate detection of suspicious trading patterns consistent with wash trading methodologies in multiple cases during 2023-2024.

- c) **Insider Trading:** Corporate insiders leveraging non-public material information for personal financial gain represents a persistent challenge. Digital platforms, with their facilitation of rapid transaction execution, potentially amplify the profitability of insider trading while complicating detection efforts. The integration of algorithmic trading systems creates additional complexities, as algorithms may inadvertently trade on information patterns that suggest insider knowledge, raising questions about liability and enforcement.

Empirical Evidence: Investment Fraud in Indonesia

Data indicates that authorities identified 1,247 unlicensed investment platforms during 2023, representing a 43% increase from 2022 figures. These platforms collectively defrauded an estimated 78,000 investors, with aggregate losses exceeding IDR 2.1 trillion (approximately USD 140 million). The predominant fraud methodology involves Ponzi schemes disguised as high-yield investment programs, typically promising returns of 10-30% monthly without corresponding legitimate business operations.

Comparative analysis with international research demonstrates that Indonesia's experience mirrors global patterns. Research by Alekseenko (2023) on crypto-exchange regulation identifies similar vulnerability patterns across jurisdictions, including inadequate consumer protections, cross-border regulatory arbitrage, and platform insolvency risks.

Regulatory Deficiencies and Enforcement Challenges

Existing regulatory frameworks, including Law No. 8 of 1995 concerning the Capital Market and various POJK regulations addressing digital platform supervision, demonstrate insufficient effectiveness in preventing and prosecuting investment fraud. Interview data from three OJK regulatory officials (conducted under confidentiality agreements) reveals several systemic constraints:

- a) **Resource Limitations:** Supervisory capacity fails to match the exponential growth of digital investment platforms. One regulator noted: "We have approximately 50 staff monitoring several hundred licensed platforms and thousands of potential unlicensed operators. It's an impossible task with current resources" (Regulatory Official #2, 2024).
- b) **Technological Sophistication Gap:** Fraudsters employ increasingly sophisticated technological methods, including AI-generated marketing content, deepfake technology for fraudulent endorsements, and blockchain-based schemes that obscure fund flows. Current regulatory technology infrastructure lacks equivalent sophistication for detection and investigation.
- c) **Cross-border Jurisdictional Challenges:** Many fraudulent platforms operate from overseas jurisdictions with minimal regulatory cooperation frameworks, creating enforcement obstacles. The borderless nature of digital commerce enables operators to establish legal entities in permissive jurisdictions while targeting Indonesian investors.
- d) **Reactive Rather than Preventive Approach:** Current regulatory posture emphasizes post-incident response rather than preventive measures. This approach allows fraudulent platforms to operate until sufficient complaints accumulate, by which point substantial investor harm has occurred.

Evidence-Based Solutions and Regulatory Technology Integration

Based on comparative regulatory analysis and international best practices, this research recommends comprehensive adoption of Regulatory Technology (RegTech) solutions for enhanced market surveillance and fraud detection:

- a) **Real-Time Transaction Monitoring Systems:** Implementation of machine learning algorithms capable of identifying suspicious trading patterns indicative of manipulation in real-time. The SEC's Market Information Data Analytics System (MIDAS) provides a relevant model, employing advanced analytics to detect market manipulation across multiple dimensions including price, volume, and order characteristics.
- b) **Enhanced Regulatory Sandbox Framework:** Expansion of OJK's regulatory sandbox program to enable comprehensive testing of platform systems, business models, and compliance mechanisms before full market authorization. Singapore's Financial Services Regulatory Sandbox provides an exemplary framework, requiring demonstration of investor protection

mechanisms, adequate capital requirements, and robust risk management systems prior to licensing.

- c) **Cross-Border Regulatory Cooperation:** Establishment of formal information-sharing agreements and coordinated enforcement mechanisms with international regulatory authorities. The IOSCO Multilateral Memorandum of Understanding provides a framework for cross-border cooperation in securities regulation that Indonesia should fully leverage.
- d) **Mandatory Platform Verification and Licensing Display:** Requirements that all investment platforms prominently display regulatory licensing information and enable real-time verification through official OJK databases. Unlicensed platforms should be subject to immediate blocking by internet service providers through coordinated action with the Ministry of Communication and Information Technology.

Data Security and Investor Protection from Cyber Risks

Investor data security constitutes a critical dimension of digital platform responsibility, with profound implications for investor protection and market integrity. This research identifies significant cybersecurity vulnerabilities within Indonesia's digital investment ecosystem, with documented instances of data breaches affecting thousands of investors.

Documented Data Breach Incidents

Documentary analysis reveals multiple significant data breach incidents affecting Indonesian digital investment platforms during 2022-2024. The most severe incident, affecting a major securities brokerage platform in early 2023, resulted in unauthorized access to personal information of approximately 87,000 investors, including identity numbers (KTP), bank account details, investment portfolios, and transaction histories. While the platform maintained that financial losses were prevented, the breach exposed investors to substantial identity theft and phishing attack risks.

Additional incidents include: (1) credential stuffing attacks exploiting reused passwords across multiple platforms; (2) social engineering attacks targeting customer service representatives to gain unauthorized account access; and (3) third-party vendor compromises providing attack vectors into platform systems. These incidents collectively affected an estimated 150,000+ investors, though comprehensive statistics remain unavailable due to inconsistent breach disclosure requirements.

Systemic Cybersecurity Deficiencies

Expert interviews with three cybersecurity professionals specializing in financial services reveal systematic deficiencies in platform security practices. Key findings include:

- a) **Inadequate Encryption Standards:** Document review and expert assessment indicate that several platforms fail to implement industry-standard end-to-end encryption for sensitive data transmission and storage. One cybersecurity consultant noted: "We've observed platforms using deprecated encryption protocols or implementing encryption incorrectly, creating false security perceptions" (Cybersecurity Expert #1, 2024).
- b) **Insufficient Multi-Factor Authentication (MFA) Implementation:** While larger platforms have adopted MFA, implementation varies substantially in quality and comprehensiveness. Some platforms employ SMS-based authentication (vulnerable to SIM-swap attacks) rather than more secure authenticator applications or hardware tokens.
- c) **Limited Security Auditing and Penetration Testing:** Many platforms lack regular independent security audits and penetration testing programs. Cybersecurity experts emphasize that continuous security assessment is essential given the rapidly evolving threat landscape.
- d) **Inadequate Incident Response Capabilities:** Several documented breaches reveal deficient incident response planning, resulting in delayed breach detection, inadequate containment measures, and poor communication with affected investors.

Regulatory Framework and Implementation Gaps

Law No. 27 of 2022 concerning Personal Data Protection (PDP Law) establishes comprehensive obligations for personal data controllers, including financial service providers.

Key provisions include: (1) requirements for obtaining explicit consent for data collection and processing; (2) obligations to implement appropriate technical and organizational security measures; (3) mandatory breach notification requirements; and (4) establishment of data subject rights including access, correction, and deletion rights.

However, implementation remains nascent. The Personal Data Protection Agency, responsible for enforcement, is still establishing operational capacity. Current enforcement actions remain limited, with no significant sanctions imposed on financial platforms for data protection violations despite documented breaches. This enforcement gap creates moral hazard, reducing platform incentives for substantial cybersecurity investments.

Comparative analysis with international frameworks reveals that Indonesia's regulatory approach aligns conceptually with the EU's General Data Protection Regulation (GDPR) and Singapore's Personal Data Protection Act (PDPA). However, effective implementation requires more prescriptive technical standards and robust enforcement mechanisms. The Monetary Authority of Singapore's Technology Risk Management Guidelines provide an exemplary model, establishing detailed cybersecurity requirements for financial institutions including specific encryption standards, access controls, and incident response protocols.

Evidence-Based Recommendations

This research recommends comprehensive strengthening of cybersecurity requirements for digital investment platforms:

- a) **Mandatory Cybersecurity Standards:** OJK and the Ministry of Communication and Information Technology should jointly promulgate detailed technical standards for financial platform cybersecurity, including: minimum encryption requirements (AES-256 for data at rest, TLS 1.3 for data in transit); mandatory MFA implementation using authenticator applications or hardware tokens; regular security auditing requirements; and incident response plan mandates.
- b) **Cybersecurity Certification Requirements:** Platforms should be required to obtain and maintain recognized cybersecurity certifications (e.g., ISO 27001, SOC 2 Type II) as prerequisites for licensing and ongoing operations.
- c) **Enhanced Breach Notification Requirements:** Implementing strict timelines for breach notification to regulators (within 24 hours of discovery) and affected individuals (within 72 hours), consistent with international best practices under GDPR.
- d) **Cyber Insurance Requirements:** Mandating platforms maintain adequate cyber insurance coverage to ensure resources for breach remediation and investor compensation.
- e) **Establishment of Financial Sector Information Sharing and Analysis Center (FS-ISAC):** Creating a coordinated information-sharing mechanism enabling financial institutions to share threat intelligence and best practices while maintaining competitive confidentiality.

Regulatory Efforts in Ensuring Legal Protection of Stock Investors

Existing Regulatory Framework: Comprehensive Analysis

Indonesia has developed a multi-layered regulatory framework governing investor protection in equity markets. This framework integrates sector-specific capital market regulations with broader consumer protection, investment facilitation, data protection, and electronic transaction laws. The following analysis evaluates each key regulatory instrument's contribution to investor protection and identifies implementation challenges:

- a) **Law No. 8 of 1995 concerning Capital Market:** This foundational legislation establishes the legal framework for Indonesia's capital market, including: (a) registration and disclosure requirements for securities issuers; (b) licensing requirements for market intermediaries; (c) prohibition of market manipulation and insider trading; and (d) OJK's supervisory authority and enforcement powers. Despite its comprehensive scope, this law predates the digital platform revolution, creating interpretation challenges regarding its application to modern trading technologies and algorithmic systems.
- b) **Law No. 25 of 2007 concerning Investment:** This legislation provides the legal foundation for both Foreign Direct Investment (FDI) and Domestic Investment (PMDN), establishing investor rights, investment procedures, and dispute resolution mechanisms. While primarily focused

- on direct business investment rather than securities investment, this law contributes to the broader investment protection ecosystem by establishing principles of legal certainty, transparency, and non-discrimination applicable across investment categories.
- c) Law No. 11 of 2020 concerning Job Creation (Omnibus Law): This comprehensive legislation amended numerous regulations affecting investment and capital markets, primarily aimed at improving ease of doing business and reducing regulatory barriers. Relevant provisions for investor protection include: streamlined licensing procedures for securities companies; clarification of investment facilitation services; and enhanced coordination mechanisms between regulatory authorities. However, critics argue that the law's focus on deregulation potentially weakens certain investor protection safeguards.
- d) Law No. 27 of 2022 concerning Personal Data Protection: This recently enacted legislation establishes comprehensive data protection requirements applicable to digital platforms, including: principles of lawfulness, fairness, and transparency in data processing; requirements for explicit consent; obligations for implementing appropriate technical and organizational security measures; data subject rights (access, rectification, erasure); and mandatory breach notification. As discussed previously, implementation remains in early stages.
- e) Law No. 19 of 2016 amending Law No. 11 of 2008 concerning Electronic Information and Transactions (ITE Law): This legislation governs electronic transactions, electronic signatures, and electronic evidence, providing legal recognition for online securities transactions. The law establishes requirements for electronic system operators, including security obligations and liability provisions for system failures or unauthorized access. Amendments in 2016 strengthened provisions related to prohibited content and defamation, though their application to investment-related communications remains ambiguous.
- f) POJK No. 1/POJK.07/2013 concerning Consumer Protection in the Financial Services Sector: This OJK regulation establishes fundamental consumer protection principles applicable to all financial service providers, including: transparency in product information and contractual terms; fair treatment obligations; complaint handling requirements; confidentiality of consumer data; and dispute resolution mechanisms. The regulation requires financial service providers to establish consumer protection functions, conduct consumer education, and report consumer complaint data to OJK regularly.

Table 3. Summary of Indonesian Regulatory Framework for Investor Protection

Regulation	Year	Key Provisions	Implementation Status
UU No. 8/1995 (Capital Market Law)	1995	Market structure, issuer obligations, anti-manipulation provisions	Fully implemented; outdated for digital platforms
UU No. 25/2007 (Investment Law)	2007	Investment rights, legal certainty, dispute resolution	Implemented; limited securities market focus
UU No. 11/2020 (Job Creation Law)	2020	Streamlined licensing, regulatory harmonization	Partially implemented; ongoing rule-making
UU No. 27/2022 (PDP Law)	2022	Data protection, breach notification, consent requirements	Early implementation; agency still developing capacity
UU No. 19/2016 (ITE Law Amendment)	2016	Electronic transactions, security requirements, liability	Implemented; ambiguities in securities application
POJK No. 1/POJK.07/2013	2013	Consumer protection principles, complaint handling	Implemented; enforcement inconsistent

Source: Regulatory document analysis and expert interviews (2024)

Discussion

Integration with Regulatory Theory

This research's findings align with and extend several theoretical frameworks in regulatory studies. The identified gaps between regulatory intent and implementation outcomes exemplify the principal-agent problem inherent in financial regulation, where information asymmetries between regulators (principals) and regulated entities (agents) create enforcement challenges. Digital platforms possess superior information regarding their technological systems, business practices, and compliance status, enabling strategic behavior that undermines regulatory effectiveness.

The research also contributes to regulatory capture theory by demonstrating how resource constraints and technological sophistication gaps create conditions conducive to de facto capture. While overt corruption or political influence may be minimal, regulatory authorities' dependence on platform cooperation for information and technical expertise creates subtle forms of capture limiting aggressive enforcement.

Furthermore, findings support responsive regulation theory, which advocates for regulatory pyramid approaches combining cooperative engagement with escalating sanctions for non-compliance. The current reactive supervision model fails to provide such graduated responses, suggesting that implementation of RegTech solutions enabling continuous monitoring could facilitate more responsive regulatory strategies.

Comparative Analysis with International Regulatory Frameworks

Comparative analysis reveals that Indonesia's regulatory challenges mirror those confronting authorities globally as financial digitalization outpaces regulatory adaptation. The European Union's Markets in Crypto-Assets (MiCA) Regulation represents the most comprehensive regulatory response to date, establishing detailed requirements for crypto-asset service providers including: licensing requirements; capital and insurance mandates; operational and governance requirements; consumer protection obligations; and market abuse prevention measures. While MiCA addresses crypto-assets specifically, its principles-based approach and emphasis on proportionate regulation adapted to risk profiles provide valuable precedents for Indonesia.

Similarly, the United Kingdom's Financial Conduct Authority (FCA) has implemented comprehensive regulation of digital engagement practices, recognizing that platform design features can systematically influence investor behavior in ways potentially inconsistent with investor best interests. The FCA's principles-based approach, emphasizing fair treatment outcomes rather than prescriptive rules, merits consideration for Indonesia's regulatory reform efforts.

Practical Implications for Policy Makers and Industry Stakeholders

For policy makers, this research provides evidence-based foundation for regulatory reform prioritization. The identified gaps algorithmic transparency, dispute resolution, RegTech integration, and data protection enforcement represent actionable intervention points where targeted regulatory initiatives could substantially enhance investor protection effectiveness. Priority should be accorded to RegTech investments, as these enable multiplicative effects by improving regulatory capacity across multiple dimensions simultaneously.

For digital platform operators, findings emphasize that enhanced self-regulation and voluntary adoption of international best practices can provide competitive advantages. Platforms demonstrating commitment to transparency, robust cybersecurity, and ethical conduct may differentiate themselves in increasingly competitive markets where investor trust constitutes valuable intangible assets. Early adopters of enhanced consumer protection measures position themselves favorably for inevitable regulatory tightening while building sustainable competitive advantages.

For retail investors, research highlights the importance of developing financial literacy and technological literacy as complementary protective mechanisms. While regulatory enhancement remains essential, investors who understand platform business models, algorithmic systems, fee structures, and their legal rights will be better positioned to protect their interests even amid

regulatory imperfections.

CONCLUSION

This research confirms that digital platform companies have an important role in the legal protection of stock investors in the e-commerce era. With the growing digitalization of the capital market, digital platforms are responsible for ensuring safe investment through information transparency, prevention of market manipulation, fraud protection, and investor data security. However, there are still many challenges, such as the lack of transparency of investment algorithms, rampant market manipulation, weak supervision, and the risk of data leakage due to sub-optimal protection systems. Existing regulations often do not fully accommodate technological developments, so there are still legal loopholes that can be exploited by irresponsible parties. To overcome this problem, strategic steps are needed such as increasing the transparency of investment algorithms, establishing digital dispute resolution mechanisms, and strengthening regulations for digital platforms operating in Indonesia. In addition, technology-based supervision (RegTech) needs to be implemented to detect suspicious transactions, along with the implementation of stricter data security standards to protect investors from cyber threats. Improving financial literacy and legal awareness for investors is also a crucial step so that they better understand their rights and risks in digital investments. Collaboration between regulators, industry and academia is needed to create adaptive regulations and more effective supervision. With these various efforts, it is hoped that legal protection for investors will be stronger, public trust in digital platforms will increase, and a safer, more transparent and sustainable investment ecosystem can be realized.

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AUTHOR CONTRIBUTION STATEMENT

Boni Siregar contributed to the conceptualization of the study, formulation of the research design, legal issue identification, and preparation of the original manuscript draft. Lesson Sihotang was responsible for conducting the literature review, developing the theoretical and legal framework, and performing comparative analysis of regulations related to digital platforms and investor protection. Roida Nababan contributed to data collection, regulatory mapping, analysis of empirical findings, and examination of policy implications. All authors jointly reviewed, revised, and approved the final version of the manuscript and agree to be accountable for all aspects of the work.

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