



From traditional to digital: Managing public trust through innovative gold pawn regulation and governance

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ABSTRACT

Background: Technological changes and the demand for digital-based financial services have driven the gold pawn industry in Indonesia to undertake innovative governance and regulatory transformations to address the public's need for safe, fast, and transparent access to financing. **Methods:** This study uses a normative legal research approach that analyzes the synchronization of regulations, corporate governance principles, and harmonization of legal norms related to the digital gold pawn business by applying legal document analysis. **Findings:** The study results show that the implementation of digitalization expands the reach of services and improves operational efficiency. However, regulatory synchronization, data security, transaction validity, and consumer protection remain key challenges that require continuous policy adaptation. **Conclusion:** Strengthening adaptive governance and responsive regulatory updates are key to maintaining public trust in digital gold pawn services. Collaboration between regulators, industry players, and public education is crucial to support financial inclusion and protect public interests. **Novelty/Originality of this article:** This study offers a comprehensive analysis of the harmonization of regulations for the gold pawn business in the digital era, highlighting the need for legal protection and technology-based governance strategies, and emphasizing the relevance of digital literacy for the sustainability of the pawn industry in Indonesia.

KEYWORDS: digital transformation; gold pawn governance; public trust.

1. Introduction

Gold pawning has become a popular financial solution in Indonesia, offering easy access to cash using gold as collateral. This phenomenon has grown in line with the growing public demand for fast, flexible, and accessible financial services amidst the dynamics of the modern economy (Ardiani, 2015). Gold has long been considered a hedge or store of value due to its stability against inflation and liquidity. People choose gold because it is believed to have a relatively secure value and can be used as collateral without permanently losing ownership. In this context, pawn services, both conventional and sharia-compliant, have become a crucial instrument in supporting the public's access to short-term financial liquidity (Dayinta, 2019).

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Over the past decade, the Indonesian pawn industry has undergone a major transformation in line with technological advancements and the demands of modernization. PT Pegadaian, a key player in this sector, has revolutionized its operational systems by implementing digitalization through the launch of the Pegadaian Digital Service (PDS) (Putri & Supriadi, 2022). Currently we know it as the Tring application. Through this system, people can conduct various transactions, such as pawn applications, loan monitoring, and repayments, online without having to visit a branch. This transformation is expected to increase efficiency, expand service coverage, and bring financial inclusion to the community, especially in areas with limited formal banking facilities (Pegadaian, 2024a). Despite its convenience, digital transformation also raises several concerns, particularly regarding personal data security, collateral validity, and legal protection for customers. These concerns stem from potential risks such as misuse of customer data, loss of physical collateral, and doubts about online gold valuation systems.

History records that the practice of pawning has been widely known in Indonesia since the kingdom era and was strengthened again during the Dutch colonial period through a loan system with collateral in the form of valuables (Pegadaian, 2024b). Pegadaian was first established in 1901, and until now remains a non-bank financial institution that plays an important role in society (Wire, 2023). With the development of the modern economy, gold has become a dominant asset in pawnshops because it is easy to authenticate and its value tends to be stable against market fluctuations. A 2023 report from the Ministry of Finance states that more than 65% of pawn transactions in Indonesia use gold as collateral by Ministry of Finance of the Republic of Indonesia (Ministry of Finance, 2023). This shows that people still see gold pawning as a fast, safe and practical financial solution amidst the increasingly diverse choices of financial services.

Beyond serving as a financial solution, gold pawning also has significant socio-economic value. For lower-middle-class communities, gold pawning serves as an adaptive strategy to meet urgent needs such as education, healthcare, or micro-enterprise expenses without resorting to high-cost loans from informal institutions. Gold pawning serves as a buffer for household well-being, especially when facing economic pressures. Thus, the practice of gold pawning not only plays a role in the financial system but also has humanitarian value, helping to maintain the family economy (Sari & Sudardjat, 2013).

However, changing consumer behaviour in the digital era presents new challenges for pawnshops. The younger, more tech-savvy generation now prefers fast, transparent, and app-based financial services. Competition is intensifying with the emergence of various fintech companies and peer-to-peer lending services offering alternative, unsecured loans. This clearly demonstrates that these shifts in financial consumption patterns require traditional institutions like Pegadaian to innovate to remain relevant amidst the changing financial industry landscape.

In managing a gold pawnshop, the greatest challenge lies in implementing good corporate governance (GCG). This principle requires institutions to uphold transparency, accountability, responsibility, independence, and fairness in all their operations (Sudarmanto et al, 2021). In practice, pawnshops must ensure that every gold appraisal process is conducted honestly and accurately, that loan amounts are disbursed in a reasonable proportion, and that administrative fees are transparently disclosed to customers. Failure to implement these principles can lead to various risks, including legal and reputational risks, as well as operational risks. Several cases reported in the media have shown the practice of accepting counterfeit gold and manipulating collateral values in several service units (Kompas TV, 2022). This phenomenon shows the urgency of strengthening the internal supervisory system as part of risk governance.

The Indonesian government is actively updating policies to strengthen regulations in the financial services sector, including pawnbroking institutions. Law Number 4 of 2023 concerning the Development and Strengthening of the Financial Sector is a significant milestone in strengthening supervision and protection for customers and employees of pawnbroking institutions. Through Financial Services Authority Regulation Number 39 of 2024 concerning Pawnshop Business, every institution is required to implement

comprehensive risk management, have transparent reporting mechanisms, and guarantee the security of customer assets. With the implementation of the Law on development and strengthening of the financial sector/*pengembangan dan penguatan sektor keuangan* (P2SK) Law, pawnbroking business practices are expected to become more professional and consistent with the principles of good governance. This regulation also provides legal certainty for Islamic pawnbroking institutions, which have grown rapidly in recent years.

Public trust is the primary social capital needed to maintain the existence of pawnshops. Fukuyama explains that trust is the foundation of a healthy economy, as without it, financial transactions cannot proceed sustainably (Fukuyama, 1995). In the context of gold pawning, public trust in the institution significantly determines the level of customer participation and loyalty. However, in the digital era, public trust has become increasingly fragile due to the influence of information and rumours circulating rapidly through social media. A survey conducted by the Danareksa Research Institute showed that 47% of the public remains sceptical about the security of digital gold pawning, particularly regarding the risks of collateral loss, administrative errors, and customer data leaks (PT Danareksa (Persero), 2024). The public's low level of financial literacy is crucial for maintaining this situation, as many customers do not yet understand the risks or their legal rights.

According to Bank Indonesia (2022), Indonesia's financial inclusion rate has reached 85.1%, while financial literacy is only 49.7%. This disparity indicates that, despite widespread access to financial services, public understanding of their mechanisms is still suboptimal. This gap leaves the public susceptible to rumours, misunderstandings, or unethical practices that can tarnish the image of financial institutions, including pawnshops. Therefore, improving public financial literacy is an integral part of a strategy to build public trust.

Table 1. Recent trends indicate a decline in gold pawn financing at a number of pawnshops between 2021 and 2024.

Year	Financing Amount (IDR Billion)	Decrease (IDR Billion)	Percentage Decrease (%)
2021	500	-	-
2022	450	50	10
2023	390	60	13,3
2024	320	70	18

Note: Processed from the institutional repository data of Institut Agama Islam Negeri Syekh Nurjati Cirebon

The data above illustrates a downward trend in gold pawn financing of 18% over four years. This decline was caused by several factors, including fluctuations in global gold prices, changes in consumer behaviour, increased competition in the financial industry, and the ongoing adaptation of digital systems. This demonstrates that while digitalization increases efficiency, pawnshops need to adapt their risk management approaches to control potential losses and maintain public trust.

To address these challenges, PT Pegadaian and similar institutions are strengthening their innovation strategies by developing more secure and transparent digital applications. Services such as daily gold price monitoring, loan value simulations, and automatic notifications have been developed to enhance customer convenience and minimize transaction errors. However, it appears that technological advancements must be accompanied by the consistent application of governance principles to prevent new risks, such as the misuse of digital data or algorithmic errors in the collateral assessment process (Tarigan et al., 2023). On the other hand, Pegadaian is also striving to improve the competence of its human resources through digital governance training, technology-based internal audits, and the establishment of an accountable reporting system.

From a macro perspective, the gold pawn business continues to positively contribute to national economic stability. Statistics Indonesia (2024) recorded a 28% increase in pawn transactions during the COVID-19 pandemic when people needed alternative sources of

liquidity. This phenomenon demonstrates that gold pawning serves as an instrument of socio-economic stabilization during times of crisis. However, the sustainability of this role depends heavily on the extent to which pawnshops can maintain their credibility, transparency, and professionalism. Similarly, business ethics and the principle of honesty play a crucial role in maintaining trust between financial institutions and the public, especially amidst rapid technological developments.

Based on this description, research on governance, regulation, and public trust management in the gold pawn business is crucial. The issues raised encompass not only legal and economic aspects but also the social relationship between institutions and customers within the context of trust. A gap remains between regulatory implementation and on-the-ground implementation, particularly following the introduction of digital systems into the pawn industry. Furthermore, aspects of consumer protection, data security, and transaction validity require in-depth study to produce an effective and equitable policy framework.

Therefore, the urgency of this research lies in the need for a comprehensive understanding of how good corporate governance principles, regulatory effectiveness, and public trust management can contribute to the sustainability of the gold pawn business in the digital era. This study is expected to contribute academic and practical insights to the development of transparent, secure, and adaptive pawn industry policies to address the challenges of technological development. Ultimately, pawnshop institutions are expected to become a resilient, integrated, and inclusive financial pillar for the wider community in the future.

2. Methods

This research employs a normative legal research design, namely a method that emphasizes the study, interpretation, and systematization of legal norms contained in laws and regulations applicable in Indonesia. This approach positions law primarily as a set of norms (*das Sollen*), rather than as empirical social facts, so that the main focus of the analysis lies on consistency, coherence, and completeness of the existing legal framework (Juliardi et al., 2023). In this context, the research is directed to examine how legal rules govern governance, regulation, and public trust in the gold pawn business, especially in the current digital era, and to what extent these rules are able to respond to the dynamics of technological and financial innovation.

The analysis is based on primary legal sources, including laws, government regulations, and derivative regulations that specifically or indirectly regulate the gold pawn business and digital financial services. These primary materials are complemented by secondary legal sources in the form of literature, doctrines, legal expert opinions, as well as relevant previous research results that discuss financial services law, consumer protection, and digital economic regulation (Syahrudin, 2022). The primary objective of this normative method is to analyze the legal system, basic principles, and synchronization of norms related to governance arrangements, regulatory mechanisms, and public trust guarantees in the gold pawn business in Indonesia. The analysis is carried out using a legal dogmatic approach, which systematically interprets and organizes legal norms, accompanied by deductive logic that moves from general legal principles to conclusions about concrete legal issues, so that the research produces both descriptive findings and prescriptive recommendations.

This research approach combines legal document analysis with a statute approach as the main analytical path (Syarif et al., 2024). Legal document analysis is conducted by carefully examining the structure, content, and interrelationship of various legal texts, while the statute approach focuses on studying laws and regulations that form the legal basis for gold pawn practices, both at the national level and at the level of sectoral regulation (Irwansyah, 2020). Particular attention is paid to synchronization vertically and horizontally so that the position of each rule in the legal system can be clearly mapped, as well as to the implementation of these regulations in concrete terms in the dynamics of the

digital-based pawnshop business. Through this integrated method, the research produces structured legal arguments that not only answer current issues, but also identify the urgency and direction of regulatory reform needed to respond to digitalization in the gold pawn sector, thereby contributing to the strengthening of the legal basis, improving governance, and enhancing public trust in the digital gold pawn business in Indonesia

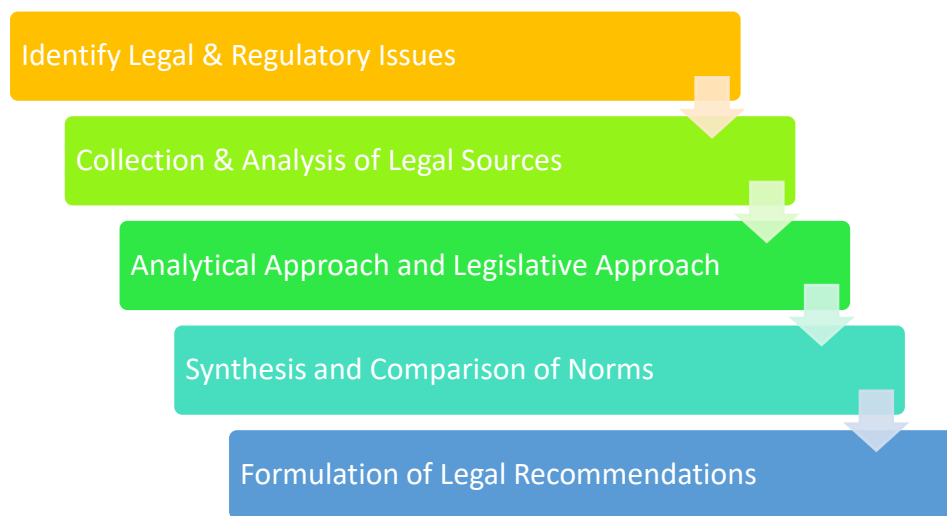


Fig. 1. Analytical framework of legal document analysis

3. Results and Discussion

3.1 Analysis of the alignment of governance and regulation of gold pawnshops in the digital era

The transformation of the gold pawn business in Indonesia is taking place very dynamically, in line with the accelerated digitalization of the financial services sector and the increasing public demand for fast, efficient, and transparent services. The background to this transformation is inseparable from the financial technology revolution, which has transformed the paradigm of public services and business governance systems. This development has encouraged pawnshops, both conventional and Sharia, to adapt new operating models based on information technology, which requires updates to regulations and corporate governance. The digitalization process has also changed consumer behaviour, who now demand the convenience of online services, personal data security, and instant access without having to visit a physical branch office.

Digitalization in the pawnshop sector includes various innovations such as the use of online applications, automated gold valuation systems, cashless payment systems, and real-time transaction monitoring platforms. However, this progress has consequences for governance systems, which must be more adaptive, accountable, and transparent to various forms of digital risk. In the context of supervision, the Financial Services Authority/*otoritas jasa keuangan* (OJK) has taken proactive steps through OJK Regulation No. 39 of 2024 concerning Pawnshop Business Activities, his regulation tightens licensing requirements, internal audits, periodic reporting, and human resource certification in the pawn industry. This regulation requires every pawnshop institution to have transparent financial and non-financial reporting mechanisms to maintain public accountability and protect customer interests.

Essentially, the principles of good corporate governance (GCG) in the gold pawn industry are based on five main pillars: transparency, accountability, responsibility, independence, and fairness. Implementing these principles is not only a moral obligation but also a legal requirement to ensure the institution's integrity in the public eye. In the digital era, the implementation of these governance principles must be integrated into every digital operational system used. This includes customer data management, collateral

valuation processes, and comprehensively digitized payment and reporting systems. The implementation of effective digital governance is essential for financial institutions, including Pegadaian, to be able to meet the increasingly critical public demands for service transparency.

In practice, the implementation of regulations and governance principles in pawnshops in Indonesia still faces several obstacles. Although systems and regulations have been established by the Financial Services Authority/*otoritas jasa keuangan* (OJK), empirical findings indicate a gap between formal policies and their implementation on the ground. Some pawnshop service units still face difficulties in ensuring the validity of digital documents, interoperability of platforms between divisions, and managing the risk of potential technology-based fraud. These issues illustrate that technology adoption must be accompanied by organizational and human resource readiness to ensure effective risk control processes.

From a legal framework perspective, regulatory harmonization is also a significant issue. Synchronization between regulations governing the financial sector and data protection is necessary to avoid overlapping or legal gaps. Currently, pawnshops operate under a legal umbrella consisting of Law No. 7 of 1992 concerning Banking, which has been changed with Law No. 10 of 1998 and some of its provisions are replaced by Law No. 6 of 2023 concerning Job Creation, remains in effect as long as it has not been completely revoked by the new law. Meanwhile, regulations on pawnbroking businesses now refer to the latest Financial Services Authority Regulation/*peraturan otoritas jasa keuangan* (POJK), and personal data protection is regulated by Law No. 27 of 2022 concerning Personal Data Protection (Personal Data Protection Law/PDP Law) which is still in effect. Regulatory disharmony can trigger legal uncertainty, which has implications for the protection of customer rights. Regulatory harmonization efforts must be based on integrated policy design so that every digital innovation gains strong legal legitimacy and ensures fairness for all parties.

In the context of risk governance, pawnshops need to implement a structured and comprehensive internal control system. Oversight of identity authentication processes, verification of collateral authenticity, and handling of customer complaints are integral parts of the institution's accountability system. This approach aligns with the governance, risk, and compliance (GRC) framework, which establishes three lines of defence: operational units as the front line, internal control units as supervisors of policy implementation, and external auditors as independent assessors (GRC Indonesia, 2023). Such mechanisms create a complementary control system, reduce the potential for moral hazard, and ensure the institution's integrity in the public eye.

The success of digital governance in pawnshops also depends on improving digital literacy among both employees and customers. Pawnshop employees need to be provided with training on digital operational procedures, cybersecurity risk mitigation, and an understanding of consumer protection policies. Meanwhile, customers need to be educated on how to use digital platforms safely and understand their rights and obligations. This education can reduce the potential for misunderstandings and increase trust in the institution.

The digitalization of the pawnshop industry also requires updates to gold quality and security certification standards. Several disputes have arisen because customers doubt the authenticity of the gold used as collateral online. To address this challenge, it is necessary to implement a technology-based traceability system, for example through the use of blockchain or a unique QR code that lists the origin and purity of the gold. This innovation not only increases customer security but also strengthens the transparency of pawnshops in the eyes of regulators and the public.

Although digitalization offers high efficiency, the issue of customer data protection and privacy remains a major challenge. Pawnshops are required to ensure the implementation UU PDP in every digital operational activity, including through security policies such as data encryption, multi-layered authentication, and regular cyber audits. The implementation of

this security strategy is not only technical but also directly related to the institution's reputation and compliance with good governance principles.

Furthermore, regulations and governance must also consider the Sharia dimension, given the growing number of Islamic pawnshop business units in Indonesia. Synchronization of conventional regulations and Sharia principles must be maintained to avoid legal dualism and confusion in the application of fatwas from the National Sharia Council-Indonesian Ulema Council (*Dewan Syariah Nasional – Majelis Ulama Indonesia*/DSN-MUI). The implementation of digital systems in Islamic pawnshops must adhere to the provisions of rahn, where contracts remain based on consent and free from elements of usury, gambling, or gharar. Aligning digitalization principles with Sharia economic fatwas demonstrates that modern regulatory mechanisms can synergize with the values of justice and Islamic business ethics.

Digital advancements in the pawnshop industry are also changing the pattern of reporting and oversight systems. The use of an analytics-based digital dashboard allows management to identify potential risks, complaint trends, and indications of fraud more quickly than with manual systems. This reporting technology streamlines the internal audit process and improves cross-departmental communication, enabling strategic decisions to be made based on real data. The use of analytics technology also improves the quality of OJK supervision of pawnshops by utilizing real-time data to assess compliance with regulatory requirements.

Policy synchronization is crucial to ensuring that every technological innovation remains controlled within clear legal boundaries. In the context of electronic information and transaction law, the development of digital technology demands regulatory updates that align with advances in electronic systems and modern transaction practices. Therefore, existing regulations need to be evaluated and adapted to developments in artificial intelligence, which have the potential to be used in gold valuation and digital transaction verification. Going forward, new regulations should establish minimum standards for legal protection, digital asset security, and mechanisms for handling electronic incidents such as data leaks and system disruptions to ensure legal certainty and justice in the digital space (Syahril, 2023). Without responsive policies, the pawn industry could face systemic risks due to technological developments moving faster than regulations.

Alignment between governance and regulation in the digital era also depends on collaboration between stakeholders: regulators, industry players, technology providers, and civil society. This collaboration is the foundation for building a resilient, inclusive, and equitable digital financial services ecosystem. The establishment of a communication forum between the financial services industry and regulators needs to be strengthened so that policy formulation can be dynamically adapted to market needs. This synergy can deliver progressive, participatory regulations, thereby narrowing the gap between policy and the reality of its implementation.

Research also shows that pawnshops that are successful in digital adaptation are those that consistently update their systems in line with regulatory developments. These institutions not only implement technological updates but also actively disseminate internal policies to customers. Open communication regarding changes to systems, fees, and services has been shown to increase public trust and strengthen customer loyalty (OJK, 2025). The institution's willingness to continuously adapt reflects a commitment to the principle of transparency, a key pillar of modern corporate governance.

In the context of improving governance quality, pawnshop institutions that implement continuous improvement through internal and external audits have proven more resilient in the face of digital operational disruptions. Audits play a crucial role as an evaluation instrument for the effectiveness of digital standard operating procedure (SOP) implementation and as an assessment of the institution's readiness to face cyber threats. Audit results should serve as the basis for policy improvements, security system enhancements, and increased employee training in digital data management. This ensures a continuous oversight cycle, rather than a reactive one only when violations occur.

More than just a business instrument, good governance and harmonized regulations in the digital pawnshop industry have strategic implications for national financial inclusion. When pawnshop institutions are able to provide secure, efficient, and accountable digital services, public access to short-term financing will increase. The multiplier effect of this is increased financial literacy, equitable distribution of financial services, and strengthened household economic resilience. In the long term, strengthening the governance and regulatory systems of digital pawnshops contributes to the achievement of sustainable development goals or Sustainable Development Goals (SDGs), especially in the pillars of poverty alleviation and improving community welfare.

Sustained collaboration among the government, the Financial Services Authority (OJK), PT Pegadaian, academics, and civil society organizations is a crucial prerequisite for achieving alignment between policies, regulations, and digital pawnshop business practices in Indonesia. This collaboration functions not only as a coordination mechanism for policymaking but also as a deliberative forum to assess the social, economic, and legal implications of digital innovation, particularly in technology-based gold pawn services. In the context of the accelerated digital transformation of the financial sector, the role of multiple stakeholders becomes strategic to ensure that the development of new business models remains consistent with the principles of consumer protection, financial system stability, and social justice.

The government, through OJK, must consistently update and refine the regulatory framework to accommodate new innovations such as gold asset tokenization and smart contract-based financing schemes. The testing of gold tokenization models within OJK's regulatory sandbox demonstrates that commodity-backed innovations require a more comprehensive regulatory architecture, including safeguards for the availability of physical gold, robust governance of smart contracts, as well as mechanisms for real-time transaction auditing and supervision. At the same time, the evolution of regulations in the bullion and digital asset sectors illustrates a shift toward a more integrated and risk-based regulatory regime, which is highly relevant for the development of digital gold pawn products.

At the institutional level, pawnshop companies are required not only to pursue commercial efficiency but also to demonstrate a strong commitment to public education and transparency. This can be realized through systematic digital and financial literacy programs for customers, the preparation and public dissemination of standard operating procedures (SOPs) that are easily accessible, and the provision of service information through official electronic channels. The implementation of fully electronic licensing, approval, and reporting processes, as mandated in the latest OJK provisions, encourages pawnshop institutions to strengthen their information technology infrastructure and enhance human resource capacity in order to meet the digital governance standards set by the authorities.

Efforts to harmonize governance and regulation in the digital era essentially have two primary objectives: consumer protection and the improvement of institutional operational efficiency. When pawnshop institutions are able to implement data-driven governance, comply with modern regulations that promote financial inclusion, and conduct proactive internal oversight, digital innovation is no longer perceived as a threat but rather as an opportunity to expand access to formal financial services for vulnerable groups and micro, small, and medium enterprises.

The findings of this study indicate that achieving alignment between governance, regulation, and digital gold pawnshop business practices requires at least four key prerequisites: integrated regulation across authorities; human resource readiness that encompasses technological, legal, and ethical competencies; strengthened cybersecurity technologies; and collaborative, cross-agency supervision. The synergy of these four elements will form the foundation of a secure, adaptive, and equitable digital pawnshop ecosystem, while simultaneously reinforcing public trust in this industry.

Accordingly, efforts to achieve alignment between governance, regulations, and digital gold pawnshop practices in Indonesia must be continuously enhanced through responsive policy updates, ongoing digital literacy programs, and well-targeted technological

investments. Pawnshop institutions can no longer be viewed solely as commercial entities; they must also act as guardians of the public interest by implementing ethical, transparent, and accountable business practices. Once these prerequisites are met, digital transformation in the pawnshop sector has the potential not only to improve economic efficiency but also to strengthen social justice and public trust as key pillars for the sustainability of the national financial industry (Gunawan, 2025).

3.2 The dynamics of public trust in the gold pawn business: Implications of digitalization and regulatory updates

The transformation of the gold pawn business in Indonesia has entered a crucial chapter in the history of the national financial industry. The shift to the digital era, strengthening regulatory aspects, and changes in public behaviour in accessing gold pawn services have given rise to new dynamics in public trust. This phenomenon is inextricably linked to global and national macroeconomic influences, developments in information technology, and regulators' responses to the dynamics of the financial services sector. Public trust, the primary foundation for the sustainability of the gold pawn business, is now being tested amidst increasing expectations for transparency, accuracy, and security of services.

Previously, public trust in pawnshops was based primarily on traditional social relationships and institutional reputations built through long experience providing financial solutions to small and medium-sized businesses. Gold pawning was considered a safe and convenient emergency financing mechanism, especially for those without access to banks or formal credit (Iskandar, 2023). The collective value inherent in gold, whether as a cultural heritage, a symbol of family economic stability, or a hedge, strengthens its position as a primary object in the pawn business. In this context, public trust grows from the physical security of gold collateral, the ease of transaction processes, and the certainty of customer rights and obligations through simple yet binding pawn agreements.

Over time, the dynamics of this trust have undergone significant changes due to the penetration of digitalization in the pawn business. The adoption of digital applications, automated item appraisals, and online disbursement of funds has brought new expectations for speed and efficiency of service. However, this transformation has also brought new challenges. A national survey conducted by the Danareksa Research Institute (2024) revealed that 47% of respondents expressed concerns about the security of digital gold pawning processes. Key concerns centred on the risk of collateral loss, the validity of digital administration, the potential for fraud, and the protection of personal data. Bank Indonesia data (2022) also shows that although national financial inclusion has increased significantly, the public's financial literacy rate has only reached 49.7%. This inequality is what makes many people still feel reluctant to completely entrust their gold assets to a digital system that offers efficiency without direct physical contact (Iskandar, 2023).

On the one hand, digitalization offers significant convenience. Customers can register, apply for pawn loans, and monitor collateral status online via mobile devices, without having to visit a pawnshop outlet. Administrative management is streamlined, and payment systems are more flexible. Innovations such as gold status tracking, cashless payments, and automatic notifications reinforce the positive perception that gold pawnshops are constantly evolving. Digital transformation presents significant opportunities to expand service reach, improve operational efficiency, and create easier access for previously overlooked segments of society.

However, along with these opportunities, significant challenges arise, including limited technological understanding among some, suboptimal regulatory adjustments, and concerns about the security and validity of digital systems. Many cases are characterized by increased customer complaints due to miscommunication, unaddressed policy changes, and negative experiences resulting from system disruptions. In some cases, uncertainty also arises regarding the collateral verification process, the quality of digital services, and the certainty of physical gold ownership after pawning online. In the context of consumer

protection, another crucial issue is the risk of cybercrime and the potential misuse of personal data, which, if left unaddressed, will result in a long-term decline in public trust.

Numerous studies confirm that trust is a key determinant of successful adoption of financial service innovations, particularly in schemes that prioritize digitalization and system automation. The Public Trust Index (*Indeks Kepercayaan Publik/IKP*) for digital gold pawnshops remains highly volatile and is influenced by numerous factors. Research by Rahmawati and Fadillah (2023) found that 42% of new customers prefer to continue using face-to-face services despite the availability of digital services, especially for large-value transactions. This phenomenon reflects the importance of psychological security and procedural clarity in strengthening consumer trust in digital gold pawnshop services.

One of the main indicators of public trust is the legal protection mechanism and clarity of collateral ownership status. Regulatory reform through the P2SK Law includes strengthened customer protection and integrated risk management provisions for pawnshops, OJK Regulation No. 39 of 2024 concerning Pawnshop Businesses requires supervisory standards, periodic reports, and human resources (HR) certification to maintain organizational professionalism. The Personal Data Protection Law signifies the state's commitment to ensuring the security of customer information in the digital era. This regulatory synchronization is seen as vital to fostering trust in digital pawnshop platforms and minimizing the potential for illegal practices.

Field practice demonstrates a gap between enacted regulations and the quality of implementation at the operational level. Several cases found by the Ombudsman and public complaints published by the media highlight the continued failure of digital systems to identify counterfeit gold, difficulties validating digital documents, and slow processing of claims for lost collateral. The 2024 independent audit report revealed that the quality of human resource training, consistent security system updates, and information transparency significantly impact public perception of pawnshop credibility. Platform interoperability issues between pawnshop branches can even result in inconsistent customer experiences and negative perceptions of corporate governance.

The implementation of digitalization requires specific preparation from an institutional perspective, human resources, and a regulatory framework. Digital standard operating procedures (SOPs) must ensure the validity of the collateral valuation and archiving process. The development of an online gold valuation system supported by blockchain or QR code technology is necessary to ensure traceability and transparency of collateral.

On the one hand, the need for good corporate governance is increasingly pressing in response to rapid innovation. Every technological innovation should be balanced by an internal control system, regular external audits, and platform updates that adapt to regulatory changes. The implementation of the three lines of defence in the oversight system business units, internal control, and external audit, must be consistently implemented to minimise any vulnerabilities in the digital ecosystem (GRC Indonesia, 2023). Data security issues, identity fraud, and internal fraud can be prevented by building an integrated and mutually reinforcing digital ecosystem. Within this framework, digital literacy for both employees and customers is key. Educated employees can act as an initial filter for risk detection, while literate customers will be better prepared to understand their rights, obligations, and complaint procedures if they encounter digital challenges.

In addition to internal challenges, external factors such as high public expectations for innovation and transparency also put pressure on the sustainability of the gold pawn business. Changing consumer demographics, increasingly dominated by a younger, digital-native generation, demand a more open and responsive communication style. Pegadaian's consistent public education efforts through social media, online workshops, and regular customer training are part of an effective integrated communication strategy to build and maintain a positive image.

Regulatory updates also have important implications for the digital innovation process in the pawn industry. Regulations must accommodate the rapid growth of digital applications, providing a clear path for innovation development without neglecting legal aspects and consumer protection. Harmonization between the Financial Sector Law, the

Financial Services Authority (OJK) Regulation, and the Personal Data Protection Law urgently needs to be strengthened, particularly to establish jurisdictional clarity in the event of digital disputes and to ensure that every transaction process has a valid legal basis. The addition of explicit articles on sanctions for cyber violations, consumer protection in the digital financial sector, and online application certification are key agenda items in contemporary policy formulation.

Another challenge is the potential for dual interpretations of the law, particularly in Sharia business units. Sharia pawnshops have their own regulations based on the DSN-MUI fatwa on *rahn* (Sharia pawn), which must be integrated into the digital system to avoid overlap between Sharia parameters and national regulations (GRC Indonesia, 2023). Software adaptation, contract digitization, and Sharia audit adjustments must be implemented responsibly to avoid legal loopholes or uncertainty regarding collateral status for Muslim customers.

To strengthen this discussion, we can examine trends in trust and behaviour among gold pawnshop customers before and after the adoption of digitalization, incorporating qualitative or quantitative data where possible.

Table 2. Complaint trends and customer satisfaction levels over the past few years, according to Pegadaian's internal data (2025)

Years	Complaints regarding digitalization (cases)	Customer satisfaction level (%)
2021	214	79,2
2022	312	76,4
2023	298	78,1
2024	223	81,5

(PT Pegadaian, 2025)

Sustained collaboration among the government, the Financial Services Authority (OJK), PT Pegadaian, academics, and civil society organizations constitutes a critical precondition for achieving substantive alignment between policies, regulations, and digital pawnshop business practices in Indonesia. Within the broader project of financial sector digitalization, such collaboration should be understood not merely as an administrative arrangement, but as a normative and institutional framework that shapes how digital innovations are conceptualized, implemented, and evaluated over time. It operates simultaneously as a coordination platform to synchronize regulatory agendas and institutional priorities, and as a deliberative arena in which the social, economic, and legal implications of digital innovation particularly technology-based gold pawn services—are scrutinized. Through this continuous interaction, stakeholders are better positioned to ensure that digital financial products are not only efficient and competitive, but also fair, inclusive, and consistent with overarching public policy objectives.

In this governance constellation, the role of multiple stakeholders becomes strategically salient. Government agencies, including OJK and relevant ministries, provide the overarching regulatory direction and macro-prudential perspective that anchor digital pawn activities within the architecture of the national financial system. PT Pegadaian and other pawn institutions contribute granular operational insights, such as evolving risk profiles, customer behavior, and technological constraints that must be incorporated into regulatory design. Academic actors supply conceptual frameworks, empirical evidence, and comparative perspectives that help identify regulatory gaps, unintended consequences, and context-sensitive best practices. Civil society organizations, for their part, articulate the perspectives of consumers and vulnerable groups, bringing issues of accessibility, literacy, and power asymmetry to the foreground. When these perspectives are brought into sustained dialogue, the development of new digital pawnshop business models can be more effectively aligned with the principles of consumer protection, financial stability, and social justice.

Within this multi-stakeholder setting, the government through OJK bears a central responsibility to continuously update and refine the regulatory framework so that it

remains responsive to emerging innovations such as gold asset tokenization and smart contract-based financing schemes. Unlike conventional pawn transactions, tokenized gold products entail the dematerialization of physical assets into digital representations, thereby introducing additional layers of valuation, custody, and cyber-security risk that cannot be handled adequately by traditional rules. Experimental initiatives using regulatory sandbox mechanisms illustrate that commodity-backed digital products require a more comprehensive regulatory architecture, including clear safeguards for the availability and segregation of physical gold reserves, robust governance standards for smart contract design and execution, and mechanisms for near real-time transaction monitoring and platform supervision. These developments coincide with a broader regulatory shift toward integrated and risk-based regimes that recognize cross-sector linkages and technological convergence among banking, capital markets, and non-bank financial institutions.

This regulatory evolution has direct implications for digital gold pawn products. It necessitates clarity regarding the legal classification of digital gold—whether it is treated as a financial instrument, a commodity-based asset, or a hybrid product with corresponding prudential, conduct, and disclosure requirements. It also calls for more coherent coordination between financial regulators, commodity market authorities, and consumer protection bodies in order to prevent regulatory arbitrage and to ensure that consumers enjoy a comparable level of protection across different platforms and providers. Regulatory reform in this context thus represents not only a technical exercise in rule-making, but also an institutional process of redistributing and streamlining oversight responsibilities.

At the institutional level, pawnshop companies are expected to move beyond a narrow emphasis on commercial efficiency and short-term profitability. In the digital era, they are increasingly required to demonstrate a verifiable commitment to public education, transparency, and responsible innovation. This commitment can be expressed through the design and implementation of structured digital and financial literacy programs that target distinct customer groups, including first-time digital users and low-income households. Such programs should extend beyond simple product promotion to enable customers to understand risks, compare alternatives, and exercise their rights in cases of dispute. Parallel to this, institutions need to standardize and publicly disseminate their operational procedures in accessible formats via websites, mobile applications, and physical branches. Enhanced transparency mitigates information asymmetries and strengthens the capacity of customers and civil society to hold institutions accountable.

The progressive implementation of fully electronic licensing, approval, and reporting processes reinforces these institutional demands. While digitalized regulatory interfaces can reduce administrative burdens and processing times, they impose stricter requirements for data quality, cyber-security, and internal governance. Pawnshop companies must therefore invest in secure data infrastructures, reliable authentication and authorization mechanisms, and integrated compliance systems that allow for timely and accurate reporting to supervisory authorities. Complementarily, staff training must extend beyond technical system use to include regulatory compliance, data ethics, and digital-era customer protection norms. Over time, these investments can help embed digital governance standards into everyday institutional practice rather than leaving them as formalistic requirements.

Efforts to harmonize governance and regulation in the digital era ultimately revolve around two core objectives: the protection of consumers and the enhancement of institutional operational efficiency. Consumer protection, in this context, involves ensuring that clients receive clear and non-misleading information, that collateral valuation and pricing practices are fair, and that accessible mechanisms for complaint resolution and redress are available. Operational efficiency concerns the capacity of institutions to streamline processes, reduce manual errors, and leverage data analytics to anticipate and manage risk. When pawnshop institutions are able to implement data-driven governance, comply with modern inclusion-oriented regulations, and maintain proactive internal oversight, digital innovation ceases to be perceived as a destabilizing threat and instead

becomes a strategic instrument for expanding access to formal financial services among vulnerable populations and micro, small, and medium-sized enterprises.

The analysis in this study suggests that robust alignment between governance, regulation, and digital gold pawnshop business practices rests on four interdependent prerequisites: integrated regulation across authorities, human resource readiness, strengthened cyber-security, and collaborative cross-agency supervision. Integrated regulation reduces inconsistencies and gaps, human resource readiness ensures that technological change is matched by legal and ethical competence, cyber-security safeguards the integrity of data and platforms, and collaborative supervision enables more coordinated and informed regulatory responses. The synergy among these elements lays the groundwork for a secure, adaptive, and equitable digital pawnshop ecosystem, while simultaneously reinforcing public confidence in the sector.

In light of these considerations, efforts to align governance, regulation, and digital gold pawnshop practices in Indonesia must be conceived as a continuous and iterative process rather than a one-off reform. This requires evidence-based policy updates, digital literacy initiatives embedded within broader financial inclusion agendas, and targeted technological investments that support both compliance and innovation. Pawnshop institutions, within this evolving landscape, can no longer be conceptualized solely as collateral-based lenders; they must also assume a public-interest role by embedding ethical, transparent, and accountable business practices into their organizational cultures and operational routines. Under these conditions, digital transformation in the pawnshop sector has the potential not only to enhance economic efficiency and institutional competitiveness, but also to contribute to the promotion of social justice and the consolidation of public trust as foundational pillars for the long-term sustainability of the national financial system.

4. Conclusions

The digital transformation of the gold pawn business in Indonesia has undeniably increased operational efficiency, streamlined service processes, and expanded public access to formal financial services, particularly for communities that were previously underserved by conventional banking institutions. Digital platforms have enabled faster transaction processing, more flexible service hours, and better integration with other financial services, thereby making gold pawn products more accessible and responsive to the needs of contemporary society. Nevertheless, behind these achievements, there remain fundamental challenges that must be addressed, especially related to gaps and inconsistencies between the existing regulatory framework and its implementation in the field.

These gaps are particularly visible in several critical areas, namely data protection, collateral security, and the application of governance standards in digital-based pawn operations. In practice, not all digital pawn service providers have implemented robust mechanisms to protect customer personal data or to guarantee the security and traceability of gold collateral managed through digital systems. This condition can potentially erode public trust if left unaddressed, because the sustainability of the digital gold pawn business is fundamentally dependent on the level of trust the public has in the system. The findings of this research reaffirm that public trust is built through a combination of transparency in information and procedures, credible and enforceable legal protection, and continuous service innovation that is aligned with technological developments as well as regulatory reforms.

Therefore, strengthening adaptive governance, responsive regulatory updates, and widespread digital literacy emerges as an urgent agenda to maintain and enhance public trust in gold pawn services in the digital era. Adaptive governance requires institutions to proactively adjust their internal policies, risk management, and technological infrastructure in line with regulatory changes and emerging risks. At the same time, regulators are expected to periodically update regulations so that they remain relevant to innovation without sacrificing consumer protection. Digital literacy for the public is also crucial so that users understand both the benefits and risks of digital gold pawn services and can utilize

them responsibly. In this context, synergy between pawn institutions, regulatory authorities, and the wider community becomes the key to ensuring that the digital gold pawn business continues to develop as an inclusive, secure, and sustainable financial solution that supports national economic development while protecting the public interest.

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Author Contribution

Conceptualization, M.A.F.S. and H.H.; Methodology, M.A.F.S. and H.H.; Formal Analysis, S.K. and M.A.F.S.; Data Curation, SK and M.A.F.S.; Investigation, S.K. and M.A.F.S.; Writing – Original Draft Preparation, M.A.F.S. and H.H.; Writing – Review & Editing, M.A.F.S. and H.H.; Visualization, M.A.F.S. and H.H.; and Final Review and Editing, M.A.F.S. and H.H.. All authors contributed to the interpretation of the findings, critically reviewed the manuscript, and approved the final version for publication.

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Ethical Review Board Statement

This study did not involve human participants, personal data, medical interventions, or experimental procedures. Therefore, ethical approval from an institutional review board or ethics committee was not required. The research was conducted through an independent normative legal approach based on the review and analysis of legislation, legal documents, scholarly literature, and relevant secondary sources. The authors upheld academic integrity, transparency, originality, and applicable publication ethics throughout the research and manuscript-preparation process.

Informed Consent Statement

Informed consent was not required because this study did not collect data from human participants, conduct interviews, surveys, observations, or use identifiable personal information. All materials analyzed were publicly available legal documents, academic literature, institutional publications, and other relevant secondary sources. The authors

maintained the integrity, confidentiality, and responsible use of all information throughout the research process.

Data Availability Statement

No new primary dataset was generated or analyzed in this study. The research findings are based on publicly accessible laws and regulations, legal documents, academic publications, institutional reports, and other secondary sources cited in the article. Any additional information supporting the findings of this study is available from the corresponding author upon reasonable request.

Conflicts of Interest

The authors declare no financial, personal, institutional, or professional conflicts of interest that could have influenced the design, analysis, interpretation, or publication of this study. The research and manuscript were prepared independently, without intervention or influence from any external party.

Declaration of Generative AI Use

Generative AI was used only to translate selected text from Indonesian into English, improve grammar and readability, and refine standard English terminology for legal, regulatory, financial, and institutional concepts. It was not used to generate the research analysis, findings, arguments, or conclusions

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