



Civilizing digital finance: How hybrid governance transforms gold-based services into an ethical safety valve for the poor

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ABSTRACT

Background: Digitalization is widely promoted as a solution for financial inclusion. However, in emerging economies such as Indonesia, the expansion of digital financial services has also contributed to problems of predatory lending and data insecurity. This study challenges the techno-centric assumption that a “digital-first” approach is inherently superior by examining how traditional gold-based financial services can be transformed into a more inclusive and protective digital ecosystem. **Methods:** Using the Digital Era Governance (DEG) framework, this study employs a qualitative single-case design to analyze the institutional transformation of PT Pegadaian (Persero). The analysis focuses on how traditional gold savings and pawn services are reconfigured into a hybrid “phygital” (physical plus digital) service model. **Findings:** The findings reveal that the success of digital transformation is not achieved by eliminating physical services but by integrating them with digital technologies. Unlike fintech platforms that rely primarily on algorithmic scoring, Pegadaian functions as an ethical safety valve by re-embedding human verification within digitally enabled processes. Physical branches continue to serve as anchors of trust, helping protect low-income users from the risks associated with predatory online lending while improving access to formal financial services. **Conclusion:** Sustainable financial inclusion in the Global South requires a human-in-the-loop governance model that balances digital efficiency with institutional trust and social protection. State-backed gold savings and pawn mechanisms can strengthen the protective function of financial institutions rather than diminish it in the process of digitalization. **Novelty/Originality of this article:** This study extends the Digital Era Governance perspective by demonstrating that hybrid governance, combining physical and digital service infrastructures, can serve as an ethical model of digital financial inclusion. It highlights the importance of human verification and trust-based service delivery in protecting vulnerable communities within an increasingly digital financial environment.

KEYWORDS: digital era governance; ethical lending; financial inclusion; hybrid governance; Pegadaian.

1. Introduction

Internet penetration surpassed 79% in early 2024, marking a decisive move from cash-based exchanges to digital platforms (APJII, 2024). This digital transformation has reshaped public service delivery and governance structures across emerging economies (Janowski, 2015), yet its impact on financial inclusion remains contested (Ozili, 2018). Yet this migration has failed to deliver the frictionless inclusion often promised in technocratic policy roadmaps. While digitalization is frequently hailed as a “great equaliser” for the

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Global South, in practice, this transition has exposed deep systemic fault lines. The unchecked proliferation of unregulated fintech lenders locally termed online loans illegal has spawned a predatory ecosystem that feeds on the very vulnerabilities it purports to address. By leveraging severe information asymmetries and exploiting regulatory blind spots, these shadow-banking entities offer instant liquidity but at a devastating cost: exorbitant effective interest rates, coercive debt-collection tactics, and a complete erosion of household privacy (Sugangga & Sentoso, 2020).

The severity of this crisis is highlighted by the 2024 National Survey on Financial Literacy and Inclusion (SNLIK). The data exposes a critical quality gap: while access to digital financial tools has surged, functional literacy has lagged dangerously behind (Otoritas Jasa Keuangan, 2024a). This phenomenon reflects broader challenges in digital financial inclusion across the Global South, where rapid technological adoption often outpaces institutional capacity and consumer protection frameworks (Philippon, 2019; Klapper & Singer, 2017). Consequently, millions of Indonesians are now “wrongly banked” technically included in the formal system, yet utilising products that exacerbate rather than alleviate their economic fragility. In this context, the primary policy challenge is no longer merely scaling up access; rather, it is designing institutional safety valves to ensure that financial inclusion does not become a conduit for exploitation.

1.1 Institutional context: The Indonesian financial paradox

Grasping the gravity of this “wrongly banked” phenomenon requires an examination of the macro-institutional context. Indonesia presents a distinct paradox. As Southeast Asia’s largest economy, it hosts a rapidly expanding digital sector projected to reach a Gross Merchandise Value (GMV) of USD 130 billion by 2025 (Google et al., 2023). Yet this digital saturation disguises a persistent financial divide. The number of unbanked and underbanked citizens remains staggeringly high, with nearly 48% of adults lacking access to formal banking (World Bank, 2022). This demographic dominated by micro-entrepreneurs, rural inhabitants, and informal workers (*wong cilik*) operates largely within a cash economy, rendering them invisible to conventional credit-scoring models. It is into this structural void that the fintech lending industry stepped. Designed to bridge the credit gap left by conservative banking practices, peer-to-peer (P2P) lending platforms promised fast, collateral-free capital through simple smartphone applications. In practice, however, the rapid influx of providers, combined with uneven regulatory capacity, created a fragmented landscape in which many low-income users encountered complex contractual terms they barely understood. The same digital rails that expanded access also deepened exposure to new forms of risk, setting the stage for the more overtly predatory dynamics examined in the next subsection.

1.2 The genesis of the crisis: The rise of online loans and the predatory void

To fully appreciate the necessity of Pegadaian’s solution, it is essential to revisit the chaotic trajectory of the “online loans crisis” between 2018 and 2023. As smartphone usage skyrocketed across the archipelago, a dangerous vacuum emerged: millions of unbanked citizens suddenly possessed internet access but still lacked any formal credit history or collateral. This structural gap in the financial system was rapidly filled by hundreds of peer-to-peer lending platforms. While a portion of these providers were formally registered, a vast number operated illegally, often hosted on offshore servers to evade Indonesian jurisdiction and exploit weak cross-border enforcement.

These platforms weaponised “big data” in ways that diverged sharply from ethical and legal boundaries. They popularised so-called “emergency loans” micro-amounts of around IDR 500,000 with tenors of only 7-14 days paired with astronomically high effective interest rates and opaque fee structures. Even more alarming was their approach to debt collection. By mandating access to personal “Contacts” and “Gallery,” these applications engineered a

mechanism of social hostage-taking: a delay of mere hours could trigger mass WhatsApp blasts to a borrower's employer, parents, and peers, branding them as thieves or fraudsters.

The cumulative effect was severe psychological distress, localised social unrest, and an erosion of public trust in digital finance more broadly. It is against this backdrop of digital trauma and regulatory vacuum that Pegadaian's transformation must be understood: the state urgently required an institution capable of matching the speed and convenience of these apps while restoring legality, transparency, and basic dignity to low-income borrowers. To systematically evaluate this institutional shift, this study is guided by two primary research questions: (1) How does PT Pegadaian operationalize the Digital Era Governance (DEG) framework to reintegrate physical and digital structures into a secure, cohesive 'phygital' ecosystem? and (2) In what ways does this state-backed hybrid model mitigate the predatory dynamics and data exploitation risks associated with purely algorithmic, private fintech platforms for vulnerable populations?

1.3 Literature review and theoretical framework

1.3.1 Reclaiming the state: From new public management to digital era governance

The evolution of public-administration theory provides the primary analytical lens for this study. For decades, the New Public Management (NPM) paradigm dominated reform agendas, emphasizing fragmentation, outsourcing, and market-like competition among semi-autonomous agencies. However, scholars increasingly argue that NPM is ill-suited to the digital age, where it produces coordination failures and accountability gaps in complex policy domains such as digital finance (Dunleavy et al., 2006). This critique has been extended by scholars who emphasise that the second wave of digital-era governance requires a more integrated approach to service delivery, one that moves beyond transactional efficiency toward contextualised governance solutions (Margetts & Dunleavy, 2013; Gil-Garcia & Pardo, 2005). To address this, the Digital Era Governance (DEG) framework proposes a reintegration of state services. DEG is characterised by three core elements: reintegration (unifying separated services), needs-based holism (designing services around citizen life events rather than bureaucratic silos), and digitalization (embedding IT into the core organizational logic). In the context of Pegadaian, DEG implies that technology is not merely a tool for automation, but a catalyst to reintegrate disparate functions identity verification, credit assessment, and asset custody into a coherent ecosystem that rebuilds institutional trust.

1.3.2 The fintech paradox: Efficiency vs predatory inclusion

The nexus between financial technology (fintech) and inclusion remains the subject of an ongoing debate. Optimistic narratives highlight how digital platforms lower transaction costs and bypass physical-infrastructure constraints, ostensibly broadening access for the unbanked (Rahayu, 2024; Utomo, 2024). The digital finance literature has burgeoned in recent years, examining how FinTech innovations create new pathways for financial intermediation while also introducing novel risks (Gomber et al., 2017). However, critical scholarship from the Global South warns that, without robust governance, digital finance can entrench new forms of vulnerability. Studies on illegal peer-to-peer lending in Indonesia document how weak oversight enables excessive effective interest rates, opaque fee structures, and coercive collection practices, including the use of "reputational collateral" through contact-list scraping (Sugangga & Sentoso, 2020).

Furthermore, the expansion of digital finance in emerging market economies has exposed severe regulatory vacuums regarding financial consumer protection and algorithmic vulnerability. Research has shown that while FinTech platforms can expand access to credit, they also create new channels for predatory lending and data exploitation, particularly in jurisdictions with weak regulatory enforcement (Bollaert et al., 2021). While initial digital governance frameworks prioritized automated efficiency and

transaction speed, recent scholarship emphasizes that rapid, unanchored digitalization often results in systemic risks, including predatory pricing, aggressive debt collection, and digital data exploitation by unregulated peer-to-peer (P2P) lenders (Utomo, 2024). Therefore, institutional trust cannot be built solely on digital convenience. It requires robust digital era governance that integrates consumer safety nets, transparent grievance-redress mechanisms, and state-backed institutional guarantees to actively shield low-income and vulnerable populations from the predatory 'speed traps' of shadow fintech platforms. This literature suggests that the key differentiator for safe inclusion is not the mere presence of an app, but whether the digital channel is embedded in a governance architecture capable of constraining such predatory behaviours.

1.3.3 Asset-based welfare: Gold as a shield against precarity

Moving beyond debt-centric models of inclusion, this study draws on asset-based welfare theory. This theoretical perspective, pioneered by Sherraden (1991), argues that asset accumulation provides a more sustainable pathway out of poverty than income-based interventions alone. Subsequent research has demonstrated that wealth disparities, rather than income gaps alone, perpetuate intergenerational inequality (Shapiro, 2004), and that asset-building strategies are particularly effective for low-income households (Grinstein-Weiss & Sherraden, 2007). Unlike consumer loans that mortgage future income and often lead to debt traps, asset-based strategies emphasise the accumulation of tangible reserves to smooth consumption shocks. For low-income Indonesian households, gold has historically served as a culturally legitimate inflation hedge and store of value, particularly for those with irregular earnings and limited access to formal investment instruments. Pegadaian's *Tabungan Emas* (Gold Savings) product effectively democratizes this asset class by enabling fractional digital ownership (PT Pegadaian, 2023). Through this lens, Pegadaian's transformation is not just about digitising pawnshops, but about converting the small, volatile cash flows of the poor into a stable asset base that builds long-term economic resilience.

1.3.4 Sharia governance as an ethical anchor

Finally, the integration of Islamic-finance principles adds a crucial normative layer to the governance discussion. Sharia jurisprudence on *rahn* (pledge) strictly prohibits *riba* (usury) and *gharar* (excessive uncertainty), requiring that financial transactions be backed by tangible underlying assets. The foundational principles of Islamic economics emphasise social justice, risk-sharing, and the prohibition of exploitative financial practices (Chapra, 2000). Islamic microfinance institutions have demonstrated that Sharia-compliant models can effectively serve low-income populations while maintaining ethical standards (Ahmed, 2002), and the broader Islamic financial system offers alternative frameworks for inclusive finance (Hassan & Lewis, 2014). National standards dictate that fees must reflect genuine service costs rather than disguised interest (Setyadhy & Wibowo, 2023). For state-owned enterprises such as Pegadaian, these religious tenets function as an ethical anchor, operating alongside conventional regulatory oversight. They help ensure that digital products remain aligned with principles of fairness and transparency, distinguishing Pegadaian's state-backed model from the purely profit-maximising logic of unregulated shadow banks.

1.3.5 Positioning Pegadaian within DEG

Taken together, these strands of literature position Pegadaian's transformation as an illustrative case of Digital Era Governance in the Global South. Rather than replicating the fragmentation typical of private fintech ecosystems where borrowing, payments, and investment are scattered across multiple apps Pegadaian's hybrid ecosystem reintegrates gold savings, pawn services, and bill payments under a single institutional umbrella. Using

DEG as the analytical lens, the Pegadaian Digital Service (PDS) can therefore be read not merely as a commercial product, but as an instrument of statecraft designed to reassert public control over an increasingly chaotic digital-finance marketplace. In doing so, Pegadaian blurs the conventional boundary between welfare and commerce: its asset-based gold products simultaneously pursue financial sustainability and function as a governance “safety valve” that steers vulnerable households away from high-interest, debt-driven forms of inclusion. To visually synthesise these theoretical arguments, Fig. 1 Illustrates the conceptual framework of the study. It demonstrates how the physical branch network (acting as the anchor of trust) intersects with the digital application (providing efficiency) to form a cohesive 'phygital' governance ecosystem.

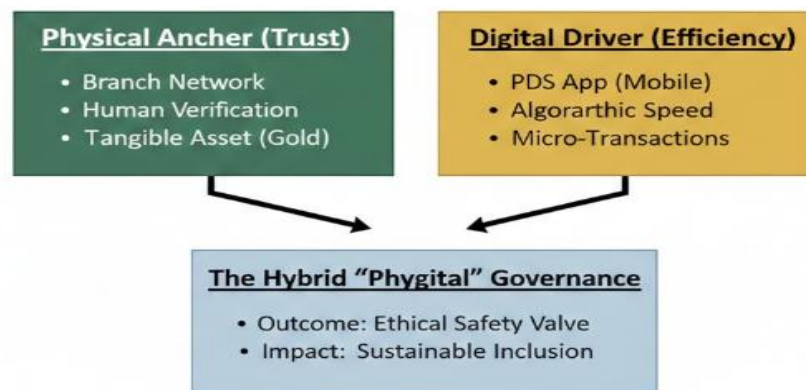


Fig. 1. The conceptual framework of pegadaian's hybrid governance model (Research analysis, 2024)

2. Methods

2.1. Research design and paradigm

This study adopts a qualitative single-case study approach with a holistic design (Yin, 2018). Within this design, governance is treated not as a fixed set of rules, but as a complex, context-bound phenomenon that can only be understood in relation to the institutional history, regulatory environment, and technological infrastructure in which it is embedded. Ontologically, the research is grounded in constructivism, which views “governance” as a dynamic reality continuously constructed through the interaction between digital systems, organizational procedures, and human users rather than as a neutral, pre-given structure.

Epistemologically, the study is positioned within an interpretivist paradigm. Instead of attempting to measure governance through decontextualised indicators, the analysis seeks to interpret how Pegadaian's hybrid ecosystem is understood and experienced as a trusted alternative to predatory lending by regulators, by the institution itself, and as reflected in the design of its digital artefacts. PT Pegadaian (Persero) is selected as a critical case (Flyvbjerg, 2006) because it represents an unusual configuration: a more-than-century-old pawn institution that has executed a substantial digital transformation without dismantling its physical branch infrastructure. Such a sustained “phygital” model is rarely observed in the banking and fintech sectors, where digitalization is often equated with branch closures and aggressive cost-cutting.

2.2. Locus and temporal scope

The locus of this research is dual-natured, encompassing both physical and digital environments. Physically, the study considers Pegadaian's nationwide branch network as the tangible anchor of trust. Digitally, it focuses on the Pegadaian Digital Service (PDS) application as the primary interface for user interaction. Treating these two loci as

analytically connected mirrors the DEG emphasis on reintegration and needs-based holism, in which the “phygital” ecosystem is understood as a single governance unit.

The temporal scope of the research spans the fiscal years 2020–2024. This period is methodologically significant because it covers the COVID-19 pandemic as a major shock event that accelerated the adoption of digital financial services, followed by a post-pandemic stabilisation phase in which digital behaviour became more routinised. Within this timeframe, Pegadaian reported substantial growth in digital transaction volumes and the number of gold-savings accounts, accompanied by the rollout of new PDS features and governance measures (PT Pegadaian, 2023). Methodologically, by focusing strictly on interface architecture, programmatic data, and institutional documents, this non-human participant design provides an objective analysis of 'governance-by-design'. This approach avoids the subjective expert-bias or recall-bias often found in localized interviews, allowing the researcher to evaluate the systematic and structural assurance features embedded directly within the state-backed financial infrastructure.

2.3. Data collection strategy

To ensure validity and richness of insight, the study employs methodological triangulation by synthesising data from three complementary sources. First, digital forensic observation is conducted through a structured walkthrough analysis of the Pegadaian Digital Service (PDS) application to simulate the user journey from registration to transaction completion. The walkthrough covers account creation, electronic Know Your Customer (e-KYC) procedures, gold-price simulation, pawn-loan calculation, transaction confirmation, and information-disclosure menus. Particular attention is given to the sequencing and clarity of the e-KYC process, the design of algorithmic transparency in gold-price and loan simulations, and the implementation of security features such as two-factor authentication (2FA) and biometric login. Screens and user flows are documented to examine how abstract governance principles are translated into interface-level choices.

Furthermore, a documentary review is undertaken using secondary data collected from regulatory and institutional documents. These include regulations issued by the Financial Services Authority (OJK), fatwas of the National Sharia Council (DSN-MUI) related to rahn, and PT Pegadaian’s Annual Reports and Sustainability Reports from 2020 to 2023. These documents provide valuable information regarding the institution’s strategic orientation, risk-management frameworks, and commitments to Good Corporate Governance (GCG).

In addition, the study incorporates a literature and policy comparison to position Pegadaian’s model within the broader financial-services landscape. Academic literature and policy reports on fintech, financial inclusion, and illegal online lending in Indonesia are analysed to compare Pegadaian’s governance protocols with practices commonly found in shadow-banking arrangements. Throughout the research process, ethical and reflexive considerations are maintained. The study relies primarily on documentary and interface-level data when discussing predatory lending practices in order to avoid retraumatisation or fear among affected users.

2.4. Data analysis method

Data analysis follows the Interactive Model developed by Miles et al. (2014), adapted to focus on the intersection between Digital Era Governance (DEG) and Good Corporate Governance (GCG). The analysis begins with data condensation, in which all collected materials are organised into a qualitative database. Using a deductive coding strategy, an initial coding framework is developed based on two theoretical anchors: the three pillars of DEG (reintegration, needs-based holism, and digitalization) and the TARIF principles of GCG (transparency, accountability, responsibility, independence, and fairness). This approach follows established e-government evaluation frameworks that emphasise both technological and institutional dimensions of governance (Gil-Garcia & Pardo, 2005; Margetts & Dunleavy, 2013). At the same time, inductive codes are incorporated whenever

recurring patterns emerge from the data, such as “defence-in-depth security” and “trust-gap framing.”

Subsequently, the condensed data are organised into various displays to facilitate systematic comparison and interpretation. In particular, comparative matrices are developed to contrast the digital governance features of Pegadaian with those commonly found in predatory fintech platforms, highlighting differences in business models, risk-containment mechanisms, and valuation transparency. In addition, narrative displays are used to summarise the evolution of Pegadaian Digital Service (PDS) features between 2020 and 2024.

Finally, conclusions are drawn and verified through an iterative analytical process. Emerging patterns are interpreted using the theoretical lenses of DEG and GCG to assess the extent to which Pegadaian’s hybrid governance model reduces the trust gap and promotes safer forms of financial inclusion. Provisional conclusions are continuously tested through repeated engagement with the raw data and the examination of disconfirming evidence. Consistent with the interpretivist paradigm, reflexive memo writing is employed throughout the analysis to critically examine the researcher’s assumptions and ensure that the findings remain grounded in the lived realities and experiences of low-income users.

2.5. Researcher positionality and ethical safeguards

In qualitative research, particularly in studies involving vulnerable populations and predatory financial practices, the researcher’s positionality is a critical variable. Given the author’s high digital literacy, interaction with the PDS interface inevitably diverges from the experience of low-literacy users. To mitigate this “expert bias”, the walkthrough analysis adhered to a strict protocol of *naïve simulation*: the researcher deliberately bypassed shortcuts or help menus and instead navigated the most intuitive paths, aiming to replicate the friction, hesitation, and confusion likely encountered by first-time *wong cilik* users.

Furthermore, given the researcher’s academic affiliation in the field of public policy and governance, efforts were made to maintain reflexive distance throughout the analysis. Continuous memo writing and peer debriefing sessions were employed to minimize personal bias and ensure that interpretations of Pegadaian’s governance model remained grounded in empirical evidence rather than normative preference. This reflexive approach reinforces the study’s analytical transparency and helps uphold objectivity despite the researcher’s proximity to the subject matter.

Finally, the study critically addressed the ethical implications of advocating gold savings. While gold is historically stable, it is not risk-free. To maintain analytical distance, Pegadaian’s fee structures (*mu’nah*) were scrutinised so that the paper does not function merely as a corporate endorsement. Disclosed fees in the app were cross-checked against actual deductions, confirming that transparency claims are empirically grounded and keeping the findings academically rigorous and distinct from marketing narratives.

3. Results and Discussion

3.1. Structural results: Reintegration in a hybrid ecosystem

The first major finding concerns the macro-structural shift undertaken by Pegadaian. Consistent with the *Reintegration* principle in Digital Era Governance (DEG), Pegadaian has consolidated previously fragmented domains rigid banking and flexible moneylending into a single hybrid ecosystem. This transformation bridges the divide between “the bank” and “the loan shark” by creating a space where low-income households access formal credit on transparent terms.

Observation of the Pegadaian Digital Service (PDS) reveals that the digital channel amplifies rather than cannibalises physical branches. Features like online booking and gold savings allow customers to initiate transactions via the app and complete physical asset delivery at the nearest outlet. In this grid, each branch acts as a trusted anchor. This

configuration generates a "long-tail effect": micro-transactions (e.g., gold top-ups of IDR 10,000), previously uneconomical at counters, become viable because digital marginal costs approach zero. Thus, physical branches remain anchors of trust, while the app extends reach, making it rational to serve millions of micro-savers ignored by conventional banks.

The Economic Logic: Gold as an Inflation Hedge for the Poor. Crucially, the choice of gold as the primary underlying asset in Pegadaian's digital ecosystem provides a macroeconomic shield for low-income users. In developing economies like Indonesia, inflation often erodes the purchasing power of the poor who typically keep their savings in cash or low-interest bank accounts. By facilitating micro-savings in gold an asset historically negatively correlated with fiat currency depreciation Pegadaian effectively democratises "wealth preservation."

Analysis of historical data suggests that while the Rupiah fluctuates, gold tends to retain real value over the long term. Therefore, the PDS app does not just offer "liquidity" (loans); it offers "stability" (savings). This distinction is vital. Predatory fintechs only offer liquidity, often at the cost of future stability through debt traps. In contrast, Pegadaian's model allows the user to access liquidity without liquidating the asset completely, as they can pledge the gold rather than sell it, preserving their economic foothold for the future.

3.2. Governance in action: Needs-based holism and information asymmetry

At the operational level, PDS substantially reduces information asymmetry a core source of unfairness in traditional pawning. Historically, valuation was an opaque negotiation, disadvantaging the *wong cilik*. Through *needs-based holism*, PDS redesigns this process around transparency. The price-simulation feature displays real-time gold prices and loan values *before* customers visit an outlet. This produces spatial equity: a user in a remote village receives the same reference price as one in Jakarta, eliminating geographic penalties. Furthermore, the integration of e-KYC with national population databases reinforces identity governance. Unlike predatory apps that leverage contact-list scraping for coercion, Pegadaian uses identity verification solely for mutual protection. In DEG terms, this combines digitalization with "structural assurance," narrowing the trust gap and reinforcing the perception that the system is safe.

To challenge purely techno-centric models, Pegadaian's phygital operationalization relies heavily on its decentralized network of over 4,000 physical branches and millions of 'Agen Pegadaian' (local human agents). When a low-income user requests a loan or accesses a gold savings account via the PDS app, the digital workflow does not completely isolate the user. For high-value transactions or initial physical gold verification, the interface automatically routes the user to the nearest physical anchor. This integration introduces a vital 'human-in-the-loop' safeguard. The physical appraiser serves as a structural barrier against identity theft and algorithmic bias, while offering face-to-face financial literacy education. This process ensures that digital speed does not compromise consumer asset safety. Importantly, these features are embedded in the user flow: sequencing price simulations before confirmation screens nudges users toward informed decisions, contrasting sharply with the "instant approval" traps of predatory lenders.

3.3. Comparative governance: Pegadaian versus predatory fintech

To evaluate Pegadaian's governance architecture, we contrast it with the operational patterns of illegal online lending (*online loans ilegal*). As summarised in Table 1, the divergence is fundamental. The comparison highlights how different governance arrangements shape levels of trust, transparency, and consumer protection in digital financial services. Detailed Analysis of Governance Divergence. The stark contrast presented in Table 1 requires deeper elaboration to understand the lived experience of the borrowers. First, regarding the Core Business Model, the divergence is fundamental. Predatory fintechs operate on a high-risk, high-return model that capitalizes on probability; they expect a certain default rate and cover it by charging exorbitant interest to compliant

borrowers. This creates a cycle where good borrowers subsidize the bad, and the cost of funds becomes predatory. In contrast, Pegadaian's asset-based model removes the speculation from lending. Because every rupiah lent is backed by gold or physical value, the interest (or *mu'nah* in Sharia terms) can be kept low and flat. The "security" is in the object, not in the fluctuating creditworthiness of the person.

Table 1. Governance comparison: Pegadaian digital vs. predatory fintech

Comparison indicator	Pegadaian digital (State-Owned & hybrid)	Predatory fintech (shadow banking)
Core Business Model	Asset-based lending; loans are fully secured by gold/collateral. Loss exposure is limited to the pledged asset.	Unsecured lending; high effective interest rates and fee stacking. Relies on future income streams.
Risk Management	Limited liability; in default, risk is confined to collateral and managed through regulated auctions.	Extended personal liability; enforced through intimidation, harassment, and social shaming of borrowers.
Valuation Transparency	Algorithmic standardisation; prices linked to real-time market references and displayed upfront.	Opaque pricing; hidden fees and variable rates that are difficult for borrowers to verify.
Data Governance	Data sovereignty; compliance with national protection standards. Access is purpose-bound.	Data exploitation; invasive access to contacts/gallery used as "reputational collateral" for blackmail.
Recovery Mechanism	Asset liquidation; lawful auction of collateral. No physical or social pursuit of the borrower.	Coercive collection; terrorizing contacts ("Look who didn't pay debt") to force repayment via shame.

Source: Research analysis based on OJK data and PDS walkthrough (2024)

This divergence extends beyond mere financial mechanics to the very social fabric of the community. Predatory lending aims to atomise the borrower, isolating them through shame and social harassment via their contact lists. Conversely, Pegadaian's model preserves social dignity. By keeping the transaction private and strictly asset-focused, the borrower avoids the stigma of public over-indebtedness. This approach effectively maintains their social capital within the community, which for the *wong cilik* is often their most vital safety net during economic crises.

Second, in terms of Risk Management and Liability, the difference is existential for the user. In the illegal fintech ecosystem, liability is personal and limitless. A default triggers a pursuit that extends beyond the borrower to their social circle, creating a psychological prison. Pegadaian's model employs "non-recourse" lending logic regarding the person. If a borrower cannot repay, the collateral is auctioned to cover the debt. Once the asset is sold, the obligation ends. There is no residual debt that follows the borrower, no debt collectors visiting their workplace, and no harassment. This "clean break" mechanism is a crucial safety valve for low-income households who face high income volatility.

Third, Data Governance represents the ethical frontline. Our analysis of the PDS app permissions confirms that Pegadaian strictly adheres to the principle of "data minimization." The app requests access only to features necessary for the transaction (e.g., camera for KYC, location for finding the nearest branch). It does not request access to the contact list ("READ_CONTACTS"). Conversely, forensic analysis of typical illegal lending apps shows a pattern of "data maximization," where the app refuses to function unless granted invasive permissions. This predatory data harvesting turns the user's privacy into leverage, violating basic human rights under the guise of credit scoring.

3.4. *The theological mechanics of protection: Rahn, Ijarah, and Qardh*

It is essential to unpack the theological mechanics that underpin Pegadaian's digital products to understand why they resist predatory tendencies. Pegadaian's Syariah division does not merely "label" products as Islamic; it utilizes specific contracts (*akad*) that structurally prevent exploitation. The primary contract is Rahn (pledge), which establishes the collateral relationship. This is often combined with Qardh (benevolent loan) for the principal amount, meaning the loan itself creates no profit for the lender. The revenue stream for Pegadaian comes from *Ijarah* (lease), which is the fee charged for the service of storing and maintaining the gold collateral.

This distinction is not semantic but structural. In a predatory loan, interest compounds over time the longer you struggle to pay, the more you owe, leading to a debt spiral. In the *Ijarah* model, the fee is based on the estimated value of storage and maintenance. While it accumulates over time, it is decoupled from the compounding logic of compound interest. Furthermore, strict Sharia supervisory boards (*Dewan Pengawas Syariah*) audit these fees to ensure they are not *riba* (usury) in disguise. This theological governance acts as a "supra-regulatory" layer, ensuring that even if profit pressures rise, the institution cannot cross the red lines of fairness established by Islamic jurisprudence. For the Muslim-majority population of Indonesia, this compliance provides not just financial safety, but "spiritual peace of mind," a value proposition that illegal fintechs cannot replicate.

3.5. *Barriers to adoption: The digital literacy divide*

While the structural governance of Pegadaian is robust, this study identifies a significant friction point at the user level: the digital literacy divide. Our analysis of user feedback and operational metrics reveals that while the *hardware* (smartphone ownership) is high, the *humanware* (cognitive capability to navigate financial apps) remains a bottleneck for the older generation of *wong cilik*. Observations indicate a phenomenon of "proxy usage," where elderly customers rely on children or agents to operate the app for them. This dependency creates a secondary risk layer. If the proxy (the person helping) is not trustworthy, the governance safeguards built into the app can be bypassed. For instance, the biometric login feature, designed for security, becomes a hurdle for manual laborers whose fingerprints are often worn out or unreadable by standard sensors. Furthermore, the "trust radius" for many rural users is still physically bound; they trust the *person* at the counter, not the *algorithm* on the screen.

Consequently, Pegadaian's challenge is not just technological but anthropological. The transition from "high-touch" (counter service) to "high-tech" (app service) cannot be abrupt. The existence of the physical branch network acts as a crucial "literacy classroom," where staff educate users on how to transition to digital channels safely. Without this educational bridge, the purely digital governance model risks alienating the very demographic it aims to protect.

3.6. *The psychology of tangibility: Why 'Phygital' wins in high-context cultures*

Beyond economics and technology, the success of Pegadaian's digital transformation must be understood through the lens of cultural psychology, specifically the distinction between "institutional trust" and "interpersonal trust." Indonesia, like many Asian nations, is a "high-context" culture where trust is built through relationships, physical presence, and tangible markers rather than abstract contractual guarantees. The Deficit of Digital Trust In the realm of purely digital fintech, trust is abstract. It is conveyed through logos, OJK registration numbers, and SSL certificates. For a digital-native user, these are sufficient. However, for the *wong cilik* (grassroots population), these symbols are often meaningless, especially when illegal apps can easily counterfeit OJK logos. This creates a "trust deficit." When an app malfunctions or a debt collector threatens them, there is no physical door to

knock on, no human face to appeal to. The "invisibility" of the lender makes the threat feels omnipresent and the recourse feel impossible.

The Anchor of Physicality Pegadaian leverages the psychology of tangibility to overcome this. The physical branch offices painted in the signature green and gold colours act as "semiotic anchors" for the digital app. Even if a user transacts 100% online, the *knowledge* that a brick-and-mortar office exists three kilometres away reduces psychological anxiety. This phenomenon is known as "mere presence effect" in consumer psychology. Furthermore, the underlying asset Gold is the ultimate tangible store of value. In the cultural cognition of Indonesians, gold is "real money," whereas bank balances are merely "records." By basing its digital ecosystem on gold, Pegadaian taps into a deep-seated cultural bias towards tangibility. The app becomes merely a window to view one's real wealth (gold), rather than a black box of abstract numbers. This "Phygital" (Physical + Digital) configuration suggests that for the Global South, successful digitalization does not mean erasing the physical world, but using the physical world to validate the digital one.

Furthermore, this "tactile trust" becomes increasingly crucial in an era rampant with digital fraud and deepfakes. When a user holds a physical pawn ticket or physically visits a branch, it creates a sensory validation that a smartphone screen simply cannot replicate. This physical verification acts as a cognitive anchor, significantly reducing the cognitive load required for a low-literacy user to trust a faceless application, thereby bridging the psychological gap between traditional culture and modern efficiency.

3.7. Significance and positioning of the study

These findings contribute to the broader literature on digital finance and governance in several ways. While prior studies focus on adoption rates or operational efficiency, this study argues that governance architecture rather than technical sophistication alone is the decisive factor in shaping the quality of financial inclusion. Digitalization without a strong framework based on DEG and GCG principles risks reproducing exclusion in new forms. The democratisation of gold savings reframes inclusion from *access to credit* towards access to assets. Empirical data indicates that Pegadaian's gold-savings customers reached approximately seven million by 2023. For low-income households, converting volatile cash flows into accumulated gold provides a hedge against inflation. Unlike high-interest consumption loans that erode net worth, this asset-based model fosters a "thickening" of household balance sheets, making economic setbacks less likely to escalate into chronic over-indebtedness.

Theoretically, this study bridges debates on e-government, financial inclusion, and Islamic finance. It shows how abstract principles like *needs-based holism* and *sharia compliance* can be translated into concrete interface features. Conceptually, Pegadaian emerges as a "policy laboratory" for the Global South, demonstrating that state-owned enterprises (SOEs) need not mimic the extractive logic of venture-capital fintechs. Instead, they can operate as "infrastructural commons" that absorb volatility and redistribute digital dividends to the vulnerable.

3.8. Global comparative perspective: Pegadaian in the context of the global south

To fully appreciate the significance of Pegadaian's transformation, it is necessary to situate it within the broader landscape of financial inclusion in the Global South. A comparative analysis with other celebrated models specifically M-Pesa in Kenya and Grameen Bank in Bangladesh reveals the unique value proposition of the Indonesian "State-Owned Hybrid" model. Comparison with M-Pesa (Kenya) M-Pesa is widely cited as the gold standard for mobile money, having successfully "leapfrogged" traditional banking infrastructure by using USSD technology on basic phones. The transformative impact of M-Pesa on financial inclusion and risk-sharing in Kenya has been extensively documented (Jack & Suri, 2014; Demirgüç-Kunt et al., 2022). While M-Pesa excels in transactional velocity and peer-to-peer transfers, its lending ecosystem has recently faced criticism

similar to Indonesia's *online loans* crisis. The emergence of digital credit apps built on top of M-Pesa rails has led to a surge in distressed borrowing among Kenyan youth. Here, the divergence is clear: M-Pesa is primarily a payment infrastructure that later added credit features, often relying on algorithmic scoring of transaction data. In contrast, Pegadaian is an asset-custody institution that added digital layers. Pegadaian's model is inherently less fragile because credit is anchored to physical assets (gold), not just behavioral data. While M-Pesa prioritizes speed and liquidity, Pegadaian prioritizes asset accumulation and security, offering a more stable, albeit slower, pathway out of poverty.

Comparison with Grameen Bank (Bangladesh) Grameen Bank pioneered microfinance through 'social collateral' and group lending circles, proving that the poor are creditworthy (Yunus, 2007). The Grameen model has been influential in demonstrating the viability of lending to the poor, though it relies heavily on social pressure and group dynamics (Dowla, 2006). However, the Grameen model relies heavily on high-touch social pressure and rigid weekly meetings, which can be socially burdensome and difficult to scale digitally without losing the "social glue." Pegadaian offers a distinct alternative: "individualised asset-based lending." In Pegadaian's model, the borrower does not need to join a group or attend meetings. The relationship is bilateral and private. This is particularly culturally compatible with the urbanising Indonesian demographic that values privacy and autonomy over communal monitoring. By digitising this process, Pegadaian scales the Grameen ethos of "trusting the poor" but removes the high social transaction costs of group meetings.

The "Indonesian Way": State-Capitalism as a Shield Uniquely, unlike the private-sector dominance in Kenya or the NGO-status of Grameen, Pegadaian represents a form of "State-Capitalism" deployed for social welfare. The Indonesian government uses Pegadaian not just to seek profit, but as a fiscal tool to stabilise the micro-economy. During the COVID-19 pandemic, for instance, Pegadaian introduced the "Gadai Peduli" program (zero-interest loans for loans under IDR 1 million). This speed of policy transmission from State Palace to user app is structurally impossible in purely private fintech ecosystems. Thus, the Pegadaian case contributes a new archetype to the development literature: the State-Owned Fintech Giant, capable of balancing market agility with public-service mandates.

The structural success of Pegadaian's framework provides critical policy implications for development planning across the Global South. The scalability of this model lies in its utilization of a culturally embedded asset—gold—as a financial stabilizer. This framework demonstrates that digital expansion does not require the erasure of physical trust anchors. Instead, other emerging economies (e.g., in South Asia or Sub-Saharan Africa) can replicate this path by applying a digital era governance layer over traditional community assets, thereby creating state-backed financial alternatives that weaken the monopolistic grip of predatory private fintech applications.

3.9. Future outlook: The AI paradox and the necessity of human touch

As Indonesia moves towards "Society 5.0," the integration of Artificial Intelligence (AI) is inevitable. This digital transformation aligns with global trends in the fourth industrial revolution (Schwab, 2017) and the broader societal shifts driven by blockchain and emerging technologies (Tapscott & Tapscott, 2016). However, this research highlights a critical paradox: while AI-driven credit scoring offers speed, it lacks the empathy required for low-income borrowers. Full automation risks alienating elderly customers or those with low digital literacy, pushing them back towards informal loan sharks who offer personal interaction.

In this context, Pegadaian's hybrid model offers a blueprint for the future. Unlike predatory platforms relying on cold algorithms, Pegadaian maintains physical touchpoints that build trust. The challenge for the next decade is to resist total automation. The organisation must ensure its transformation remains "human-centric" using technology to assist, not replace, human appraisers. This "hybrid" governance should be viewed not as a transitional phase, but as a permanent feature to safeguard against the dehumanisation of borrowing.

3.10. Alignment with UN Sustainable Development Goals (SDGs)

Finally, this study confirms that Pegadaian's digital transformation is not merely a corporate strategy but a mechanism for achieving the United Nations Sustainable Development Goals (SDGs). Specifically, the PDS ecosystem directly addresses Goal 1 (No Poverty) by providing a non-predatory financial safety net that prevents vulnerable households from falling into debt traps. It also supports Goal 8 (Decent Work and Economic Growth) by offering capital liquidity to informal micro-entrepreneurs who are otherwise invisible to commercial banks. Furthermore, by equalising access to investment instruments across the archipelago, Pegadaian contributes to Goal 10 (Reduced Inequalities). This alignment demonstrates that "hybrid governance" is a scalable pathway for emerging economies to meet global development targets by 2030.

3.11. Regulatory and policy implications

Based on these findings, the study highlights critical imperatives for the Financial Services Authority (OJK). The Pegadaian model suggests that regulators should institutionalise a "hybrid standard" for consumer protection. High-risk digital-lending platforms should be incentivised to partner with offline agents to provide verification and human recourse. Based on these insights, financial regulators must mandate stricter consumer protection algorithms for private fintech operators, including mandatory cooling-off periods and localized user interfaces. Financial inclusion metrics must move away from evaluating sheer transaction volumes and instead prioritize the level of structural protection and public trust guaranteed to the most vulnerable users. Furthermore, financial literacy needs to move from seminar rooms to app screens. The concept of "literacy-by-design" should be mandated, requiring simplified cost simulations and risk warnings that appear before a transaction-execution button becomes active. This intervention reduces the "click-first, think-later" dynamic common in predatory apps.

3.12. Managerial implications for PT Pegadaian

From a managerial perspective, sustaining Pegadaian's governance advantage requires specific interventions. First is UI/UX localisation. The current interface follows modern design languages that may be intuitive for urban users but alienating for rural customers. Management should consider a "Lite Mode" with larger buttons and vernacular-language options to assist low-literacy users. Second, to shift users from borrowers to savers, the *Tabungan Emas* feature could incorporate gamification elements. Rewarding consistent saving behaviour with lower *mu'nah* (maintenance fees) on future loans would align commercial incentives with the social mission of strengthening household resilience.

3.13. Limitations and future research directions

This study acknowledges certain limitations. As a qualitative single-case study focused entirely on PT Pegadaian in Indonesia, the findings reflect a unique institutional history, regulatory framework, and cultural attitude toward gold. Therefore, these operational dynamics may not automatically apply to entirely private financial sectors or countries with different asset traditions. Future research should pursue comparative empirical studies contrasting Pegadaian's phygital model with state-backed financial institutions in other developing markets. Additionally, mixed-methods or quantitative surveys tracking user-level trust over time would greatly enrich the empirical literature on digital era governance.

4. Conclusion

This study concludes that institutional architecture determines the quality of financial inclusion more decisively than technological adoption alone. The transformation of PT

Pegadaian (Persero) demonstrates how Digital Era Governance (DEG) can be operationalized to protect vulnerable populations by maintaining a "phygital" ecosystem that integrates algorithmic efficiency with human verification at physical branches. This configuration functions as an ethical safety valve, shielding low-income users from predatory lending practices (*online loans*). Theoretically, these findings challenge technocentric assumptions by proving that a "human-in-the-loop" governance model - grounded in *needs-based holism* (Dunleavy et al., 2006; Margetts & Dunleavy, 2013) - is superior for sustaining institutional trust in the Global South. Moreover, the shift from debt-driven inclusion to asset-based welfare through gold savings provides a more resilient pathway against inflation and economic precarity, consistent with asset-building theories that emphasise wealth accumulation over income support (Sherraden, 1991; Shapiro, 2004).

From policy and managerial perspectives, regulators such as the Financial Services Authority (OJK) should adopt Pegadaian's hybrid architecture as a benchmark for mandating "literacy-by-design" interfaces and hybrid verification standards (Klapper & Singer, 2017; Philippon, 2019). For managerial practice, PT Pegadaian must continue to refine its digital interface with vernacular options and gamification features that encourage saving over borrowing. Ultimately, Pegadaian offers a replicable blueprint for how state-owned enterprises can "civilise" digital disruption, ensuring that financial inclusion remains a tool for empowerment rather than exploitation (Florio, 2013; Kishimoto & Petitjean, 2017). By embedding ethical safeguards, this model directly contributes to the UN Sustainable Development Goals (UN General Assembly, 2015), particularly Goal 1 (No Poverty) and Goal 10 (Reduced Inequalities), while converting technological turbulence into equitable stability.

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Author Contribution

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Conflicts of Interest

The authors declare no conflict of interest.

Declaration of Generative AI Use

During the preparation of this work, the author used ChatGPT (OpenAI) and Grammarly to assist in improving language quality, grammar, sentence structure, clarity, and academic writing style. After using these tools, the author reviewed and edited the content as needed and took full responsibility for the content of the publication.

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References

- Ahmed, H. (2002). Financing microenterprises: An analytical study of Islamic microfinance institutions. *Islamic Economic Studies*, 9(2), 27-64. <https://www.findevgateway.org/sites/default/files/publications/files/mfg-en-paper-financing-microenterprises-an-analytical-study-of-islamic-microfinance-institutions-2002.pdf>
- APJII. (2024). Jumlah pengguna internet Indonesia tembus 221 juta orang. Asosiasi Penyelenggara Jasa Internet Indonesia. <https://apjii.or.id/berita/d/survei-apjii-2024>
- Bollaert, H., Lopez-de-Silanes, F., & Schwienbacher, A. (2021). Fintech and access to finance. *Journal of Corporate Finance*, 68, 101941. <https://doi.org/10.1016/j.jcorpfin.2020.101941>
- Chapra, M. U. (2000). *The future of economics: An Islamic perspective*. The Islamic Foundation.
- Demirgüç-Kunt, A., Klapper, L., Singer, D., & Ansar, S. (2022). *The Global Findex Database 2021: Financial inclusion, digital payments, and resilience in the age of COVID-19*. World Bank. <https://www.worldbank.org/en/publication/globalfindex>
- Dowla, A. (2006). In credit we trust: Building social capital—Grameen Bank in Bangladesh. *The Journal of Socio-Economics*, 35(1), 102-122. <https://doi.org/10.1016/j.socec.2005.11.006>
- Dunleavy, P., Margetts, H., Bastow, S., & Tinkler, J. (2006). *Digital era governance: IT corporations, the state, and e-government*. Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780199296198.001.0001>
- Florio, M. (2013). *Network industries and social welfare: The experiment that reshuffled European utilities*. Oxford University Press.
- Flyvbjerg, B. (2006). Five misunderstandings about case-study research. *Qualitative Inquiry*, 12(2), 219-245. <https://doi.org/10.1177/1077800405284363>
- Gil-Garcia, J. R., & Pardo, T. A. (2005). E-government success factors: Mapping practical tools to theoretical foundations. *Government Information Quarterly*, 22(2), 187-216. <https://doi.org/10.1016/j.giq.2005.02.001>
- Gomber, P., Koch, J. A., & Siering, M. (2017). Digital Finance and FinTech: Current research and future research directions. *Journal of Business Economics*, 87(5), 537-580. <https://doi.org/10.1007/s11573-017-0852-x>
- Google, Temasek, & Bain. (2023). *e-Conomy SEA 2023: Reaching new heights - Navigating the path to profitability*. Google, Temasek, and Bain & Company. <https://www.bain.com/insights/e-conomy-sea-2023/>

- Grinstein-Weiss, M., & Sherraden, M. (2007). Asset building and low-income families. In *Encyclopedia of Social Work*. Oxford University Press.
- Hassan, M. K., & Lewis, M. K. (Eds.). (2014). *Handbook on Islam and economic life*. Edward Elgar Publishing.
- Jack, W., & Suri, T. (2014). Risk sharing and transaction costs: Evidence from Kenya's mobile money revolution. *American Economic Review*, 104(1), 183-223. <https://doi.org/10.1257/aer.104.1.183>
- Janowski, T. (2015). Digital government evolution: From transformation to contextualization. *Government Information Quarterly*, 32(3), 221-236. <https://doi.org/10.1016/j.giq.2015.07.001>
- Klapper, L., & Singer, D. (2017). The opportunities and challenges of digitizing government-to-person payments. *World Bank Research Observer*, 32(2), 211-234. <https://doi.org/10.1093/wbro/lkx003>
- Margetts, H., & Dunleavy, P. (2013). The second wave of digital-era governance: A quasi-paradigm for government on the Web. *Philosophical Transactions of the Royal Society A*, 371(1987), 20120382. <https://doi.org/10.1098/rsta.2012.0382>
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). SAGE Publications.
- Otoritas Jasa Keuangan. (2024). *Survei Nasional Literasi dan Inklusi Keuangan (SNLIK) 2024*. Otoritas Jasa Keuangan.
- Ozili, P. K. (2018). Impact of digital finance on financial inclusion and stability. *Borsa Istanbul Review*, 18(4), 329-340. <https://doi.org/10.1016/j.bir.2018.04.003>
- Philippon, T. (2019). On fintech and financial inclusion. *NBER Working Paper No. 26330*. <https://www.nber.org/papers/w26330>
- PT Pegadaian. (2023). *Annual report 2023: Accelerating sustainable future*. PT Pegadaian (Persero). <https://www.pegadaian.co.id/investor-relation/laporan-tahunan>
- Rahayu, W. (2024). Does financial inclusion strengthen the fintech-growth nexus? *Jurnal Ekonomi dan Bisnis Indonesia*. <https://analysisdata.co.id/index.php/JEBI/article/view/274>
- Schwab, K. (2017). *The fourth industrial revolution*. World Economic Forum. <https://www.weforum.org/about/the-fourth-industrial-revolution-by-klaus-schwab>
- Setyadhy, S., & Wibowo, A. K. (2023). State-owned enterprises as development agent: Between business entities and social responsibility. *JOUMI – Journal of Management and Innovation*. <https://ejournal.alhafiindonesia.co.id/index.php/JOUMI/article/view/532>
- Shapiro, T. M. (2004). *The hidden cost of being African American: How wealth perpetuates inequality*. Oxford University Press.
- Sherraden, M. (1991). *Assets and the poor: A new American welfare policy*. M.E. Sharpe.
- Sugangga, A., & Sentoso, H. (2020). Legal issues of illegal fintech P2P lending in Indonesia. *Jurnal Jurisprudence*, 10(1), 113-130. <https://doi.org/10.23917/jurisprudence.v10i1.115>
- Tapscott, D., & Tapscott, A. (2016). *Blockchain revolution: How the technology behind bitcoin is changing money, business, and the world*. Penguin.
- UN General Assembly. (2015). *Transforming our world: the 2030 Agenda for Sustainable Development*. United Nations. <https://sdgs.un.org/2030agenda>
- Utomo, M. F. W. (2024). Bridging gaps: Analyzing fintech adoption and financial inclusion in Indonesia. *Ekuitas: Jurnal Ekonomi dan Keuangan*. <https://ejournal.stiesia.ac.id/ekuitas/article/view/5929>
- World Bank. (2022). *The Global Findex Database 2021: Financial Inclusion, Digital Payments, and Resilience in the Age of COVID-19*. World Bank Publications. <https://www.worldbank.org/en/publication/globalfindex>
- Yin, R. K. (2018). *Case Study Research and Applications: Design and Methods* (6th ed.). SAGE Publications.

Yunus, M. (2007). *Banker to the Poor: Micro-Lending and the Battle Against World Poverty*. PublicAffairs.

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