

Trust as a Mechanism of Systemic Coupling in ASEAN's Digital Transformation

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ABSTRACT

Digital transformation in Southeast Asia unfolds across a profoundly uneven infrastructural landscape, generating structural asymmetries that undermine regional integration. This article critically examines how ASEAN policy documents (including the ASEAN Digital Masterplan 2025, the ASEAN Data Management Framework, the ASEAN Guide on AI Governance and Ethics, Singapore's National AI Strategy 2.0, and the UN E-Government Survey 2024) deploy the concept of "trust" as a compensatory mechanism for these deficits. Applying Niklas Luhmann's Social Systems Theory, this study positions trust not as a normative ethical value but as a functional necessity engineered to reduce social complexity and enable structural coupling between the political system and the economic and technological systems it seeks to coordinate. Through systematic corpus analysis of 14 coded passages across seven policy documents, this article identifies five dominant trust functions, namely adoption prerequisite, security proxy, governance outcome, empowerment goal, and fragile condition, and maps six operative coupling relations across government, market, citizen, and technology domains. The findings reveal that trust is consistently constructed as a discursive substitute for structural deficits rather than as an organic outcome of robust infrastructure. This analysis contributes a Luhmannian systems critique of ASEAN's digital governance architecture and its implications for regional legitimacy.

Keywords: *trust; ASEAN digital governance; Luhmann; structural coupling; digital transformation*

INTRODUCTION

Digital transformation in Southeast Asia unfolds not in a homogeneous vacuum but across a highly uneven infrastructural landscape. Disparities in internet penetration, digital literacy capacity, and regulatory readiness among member states create a fragmentation that threatens regional integration. Internet penetration rates across the ten ASEAN Member States (AMS) range from above 90 percent in Singapore to below 50 percent in several lower-income economies, and rural connectivity gaps persist even within relatively advanced digital economies such as Malaysia and Thailand (ASEAN, 2021a). These are not merely technical inconveniences; they constitute structural asymmetries that fundamentally condition what digital governance can accomplish.

The stakes of this challenge extend beyond Southeast Asia. Survey data on institutional trust indicate that public confidence in governments and technology companies has declined in many parts of the world, creating a climate in which trust-building is increasingly treated as a policy priority rather than a social by-product of good governance (Edelman Trust Institute, 2025). In the ASEAN context, this global pattern intersects with distinctive regional

conditions, making the construction of digital trust both more urgent and more structurally fraught than in well-resourced institutional environments.

Confronted with this structural asymmetry, ASEAN's strategic policy documents function not merely as technical roadmaps but as regional governance instruments designed to maintain systemic stability and project a narrative of coherent digital integration. This critical policy analysis unpacks how regional narratives shift from the mere development of physical infrastructure toward a socio-psychological construction, wherein "trust" is engineered as the primary mechanism to bridge the disparity gap.

This shift carries real significance. When infrastructure is inadequate, policymakers face a choice: invest in material conditions, or invest in the narrative conditions that make existing infrastructure appear sufficient. The ASEAN digital policy corpus, as this article argues, consistently opts for the latter, deploying "trust" as a discursive compensator that keeps the digital economy moving without resolving its underlying structural contradictions. The ASEAN Digital Masterplan 2025 (ASEAN, 2021b) states plainly that "without security, trust and protection from harm, digital services will not be used," positioning trust as a prerequisite condition rather than a consequence of digital quality.

This article makes three contributions. First, it applies Niklas Luhmann's Social Systems Theory to the ASEAN digital governance context, extending systems-theoretical approaches to regional organisations (Christianti & Wahyuni, 2017) to the domain of digital policy. Second, it offers the first systematic corpus analysis of trust discourse across five major ASEAN and member-state digital policy documents, coded across 14 passages with thematic and actor-relational dimensions. Third, it critically maps the operative coupling relations that "trust" is designed to establish between the political system and the economic and technological systems it seeks to regulate, revealing the structural limitations of trust as a governance instrument.

LITERATURE REVIEW

Trust in Digital Governance

Within contemporary digital governance scholarship, trust is widely conceptualised as a critical enabling condition for the adoption and legitimacy of digital systems. Empirical studies consistently demonstrate that digital transformation initiatives, particularly e-government services, are closely tied to the production of citizen trust through transparency, service quality, and institutional performance. For example, Mergel et al. (2019) highlight that digital government transformation requires not only technological capacity but also institutional arrangements that sustain public trust through accountability and responsiveness.

At the same time, this relationship is not linear. Trust does not automatically emerge from digitalisation; rather, it is mediated by infrastructural conditions, institutional quality, and user experience. Comparative studies across developing and emerging economies show that disparities in digital infrastructure and governance capacity significantly affect citizens' willingness to adopt digital services (Bannister & Connolly, 2011; OECD, 2019). These findings challenge the assumption, often embedded in policy discourse, that expanding digital systems will inherently generate trust.

At the policy level, international frameworks further emphasise that trust depends on more than technical infrastructure. The OECD (2019) conceptualises “data governance for trust” as a multidimensional construct requiring transparency, stakeholder inclusion, risk management, and enforceable accountability mechanisms. This perspective underscores that trust is not simply a by-product of technological systems but is actively shaped by governance design.

Trust, Data Governance, and Digital Sovereignty

The increasing centrality of data in digital economies has shifted scholarly attention toward the relationship between trust and data governance. In this context, trust is often framed as a prerequisite for enabling cross-border data flows and digital economic integration. Concepts such as “Data Free Flow with Trust” (DFFT) explicitly position trust as the foundation for interoperable global data governance systems (Aaronson, 2021).

Recent scholarship on digital sovereignty further highlights the multidimensional nature of trust, encompassing regulatory alignment, technical reliability, institutional legitimacy, and stakeholder participation. These studies suggest that trust operates not merely as a psychological attitude but as a structural condition embedded within governance architectures (Pohle & Thiel, 2020).

However, trust is frequently invoked in contexts characterised by fragmentation and regulatory asymmetry. In such environments, trust becomes a mechanism for enabling coordination in the absence of full institutional harmonisation, particularly relevant in regional organisations such as ASEAN.

Trust and Artificial Intelligence Governance

The rapid expansion of artificial intelligence has further intensified the role of trust in digital governance discourse. Research on AI governance consistently identifies trust as a central objective, particularly in addressing concerns related to algorithmic bias, opacity, and misinformation (Floridi et al., 2018). Regulatory frameworks increasingly emphasise transparency, explainability, and accountability as mechanisms for fostering trust in AI systems.

Yet, a growing body of literature points to a critical tension: while trust is promoted as a policy goal, the institutional and technical conditions required to sustain it, such as independent oversight and verifiable standards, remain unevenly developed (Leslie, 2019). As a result, trust in AI governance often functions as an anticipatory construct, invoked to enable adoption before robust safeguards are fully in place.

Recent scholarship on AI governance in Southeast Asia further highlights the structural challenges of coordinating regulatory approaches across heterogeneous national systems. For example, Putra (2024) demonstrates that ASEAN’s AI governance landscape remains fragmented, with significant disparities in policy readiness, institutional capacity, and regulatory frameworks across member states. These asymmetries complicate the development of region-wide trust, as governance mechanisms must operate across uneven technological and institutional environments.

Similarly, broader analyses of AI governance in Asia suggest that regulatory approaches in the region are shaped by historical trajectories of internet and telecommunications governance,

leading to a gradual shift from soft, guideline-based frameworks toward more formalised regulatory mechanisms (Xu et al., 2024). This transition reflects an ongoing tension between flexibility and enforcement, where trust is often mobilised to enable coordination in the absence of fully institutionalised regulatory systems.

Together, these studies reinforce the argument that trust in AI governance is not merely a normative objective but a structural necessity in contexts where regulatory coherence and enforcement capacity remain uneven.

ASEAN Governance and the Politics of Trust

The role of trust in ASEAN governance must be understood within the region's distinctive institutional architecture. ASEAN operates through consensus-based decision-making and principles of non-interference, relying on soft law instruments and voluntary compliance rather than binding enforcement mechanisms. In such a system, trust functions not only as a social condition but as a core governance mechanism.

Studies on governance in Southeast Asia indicate that trust is closely linked to transparency, anti-corruption measures, and public service delivery improvements (Quah, 2018). However, these same studies highlight persistent structural asymmetries across member states, including disparities in infrastructure, regulatory capacity, and institutional effectiveness. These asymmetries complicate the construction of region-wide trust, as citizens' experiences of digital governance vary significantly across national contexts.

This structural heterogeneity creates a fundamental tension: ASEAN must construct trust across diverse systems without the institutional capacity to enforce uniform standards. As a result, trust is often produced through policy narratives, frameworks, and normative commitments rather than through consistently realised institutional practices.

Viewed from this angle, ASEAN's digital policy documents are best understood not simply as technical governance instruments but as strategic narratives: purposefully authored texts through which a regional body actively manages what might be called crises of institutional legitimacy. Public communication scholars and governance theorists have long recognised that in contexts of governance uncertainty, formal policy texts serve as tools of issue management, framing problems in ways that allocate responsibility, project institutional confidence, and stabilise expectations among both internal constituencies and external observers (Fairclough, 2003). Luhmann's systems theory provides a precise account of why this occurs: when the political system faces complexity it cannot reduce through direct regulatory action, it compensates through communication, producing texts that perform the work of coordination without commanding it. ASEAN's trust-saturated policy corpus is precisely this kind of strategic communicative output. The concept of trust is not merely a governance objective embedded in these documents; it is the primary medium through which the regional political system manages the structural anxieties of incomplete and uneven digital integration.

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Research Gap and Theoretical Contribution

Existing literature provides substantial insight into the relationship between digital governance and trust, particularly in terms of transparency, accountability, and technological capability. However, much of this scholarship treats trust either as an outcome of effective governance or as a normative objective to be achieved.

What remains underexplored is how trust functions within policy discourse itself, particularly in contexts where structural deficits persist. While prior studies acknowledge infrastructural and institutional challenges, they rarely examine whether trust may be mobilised discursively to compensate for these limitations.

This study addresses this gap by applying Niklas Luhmann's Social Systems Theory to analyse how trust operates not merely as an outcome, but as a functional mechanism that enables coordination across structurally differentiated systems. In doing so, it shifts the analytical focus from whether trust is achieved to how trust is constructed and operationalised within regional digital governance frameworks.

This analytical reorientation also reconceives the genre of the documents under study. Rather than treating ASEAN policy texts simply as governance instruments, this article positions them as strategic narratives: deliberate communication outputs through which a regional body manages crises of institutional legitimacy and navigates structural complexities it cannot resolve through direct regulatory authority. This framing draws on the intersection of Luhmann's systems theory and the literature on political communication, which recognises that governance bodies routinely deploy symbolic and discursive outputs to stabilise their environment and manage expectations under conditions of structural uncertainty (Luhmann, 1996; Mattheis, 2012). From this perspective, the appearance of trust discourse in ASEAN documents is not incidental to good governance writing; it is a deliberate communicative strategy for projecting systemic coherence when material conditions render that coherence difficult to substantiate. Understanding these texts as strategic narratives rather than neutral policy guides reveals the communicative labour involved in holding together a structurally heterogeneous regional project.

THEORETICAL FRAMEWORK

Luhmann's Trust as Complexity Reduction

To understand the articulation of trust within ASEAN documents, this analysis detaches the definition of trust from its normative ethical and moral roots. Drawing on Niklas Luhmann's Social Systems Theory, trust is strictly positioned as a functional necessity designed to achieve the reduction of complexity (Luhmann, 2017). In an ASEAN digital ecosystem fraught with uncertainty, ranging from the risks of data breaches and AI misuse to regulatory asymmetries between member states, the regional political system faces the threat of functional paralysis. Trust, in this context, is operationalized as a compensatory mechanism: it serves as a cognitive substitute when technical certainty and physical infrastructure are inadequate.

Luhmann distinguishes between confidence and trust: confidence is the taken-for-granted assumption that familiar things will remain stable, while trust is a deliberate engagement with risk, premised on the willingness to act despite uncertainty (Luhmann, 2017). The ASEAN corpus, as this analysis will show, consistently conflates these two categories, a conflation identified in the dataset as Implied Assumption A13. This matters because confidence can be disrupted by a single failure event, while trust, properly understood, requires continuous relational work between actors. The policy prescriptions that follow from conflating the two are therefore systematically inadequate.

Structural Coupling and Autopoietic Systems

In Luhmann's Social Systems Theory, social systems, including the economy, politics, and technology, operate as closed, autopoietic entities with their own logical codes (Luhmann, 1996). The economic system operates on the payment/non-payment code; the political system on the power/opposition code; and the technological system on the functional/dysfunctional code. These systems cannot directly communicate with one another, but they can be structurally coupled, connected through shared interfaces that allow each system to use the other's outputs as inputs without destroying the operational logic of either (Luhmann, 1992).

Structural coupling is not a harmonious merger of systems; it is a managed irritation: a condition in which one system's operations trigger resonance in another without collapsing the distinction between them (Mattheis, 2012). Regional governance documents, such as the ASEAN Communication Master Plan 2018–2025 and the ADM 2025, function as structural coupling instruments: they provide a shared discursive interface through which the political system (ASEAN) attempts to align the operations of the economic system (digital markets) and technological system (AI, IoT, cybersecurity infrastructure) without commanding them directly.

Trust in the Context of Regional Governance Asymmetry

The systemic complexity of ASEAN is amplified by the heterogeneity of its member states. Unlike the European Union, ASEAN does not operate through supranational legislative authority; it relies instead on consensus, non-interference, and the production of normative frameworks that member states are expected to adopt voluntarily. This structural feature means that regional governance instruments are inherently "soft": they operate through persuasion, norm diffusion, and the construction of shared expectations rather than through binding enforcement (Rautakivi & Yolles, 2023). Trust, in this context, is not merely a sociological concept; it is the primary operational medium of ASEAN governance itself.

This distinguishes ASEAN's use of trust from the trust literature in organisational sociology, where trust is typically conceptualised as an outcome of demonstrated ability, benevolence,

and integrity over time (Mayer et al., 1995). In ASEAN's policy corpus, trust functions prospectively: it is invoked as a goal to be engineered rather than as an outcome of verified performance. This prospective character is precisely what Luhmann's framework illuminates: trust enables action in advance of verification, absorbing complexity that cannot yet be reduced through technical means (Luhmann, 2017; Zucker, 1985).

METHOD

This study employs a qualitative critical policy analysis combined with systematic corpus coding, guided by Niklas Luhmann's Social Systems Theory as its primary analytical framework. The objective is not to measure the frequency of "trust" discourse across the entirety of ASEAN digital governance documents, but to identify and analyse structurally significant instances in which trust is mobilised as a functional mechanism within policy communication.

Corpus Selection

The corpus consists of seven policy documents selected through purposive sampling based on three criteria: (1) institutional authority, (2) relevance to regional or national digital governance, and (3) explicit or implicit engagement with the concept of trust in relation to digital systems. These include: (1) the ASEAN Digital Masterplan 2025; (2) the ASEAN Data Management Framework; (3) the ASEAN Guide on AI Governance and Ethics; (4) the ASEAN Communication Master Plan 2018–2025; (5) Singapore's National AI Strategy 2.0 2023; (6) the Philippine Development Plan 2023–2028; and (7) the Malaysia AI Roadmap Playbook. The inclusion of both ASEAN-level and member-state-level documents enables a multi-level governance perspective, capturing how regional narratives of trust are articulated and translated across different policy contexts.

Data Extraction and Passage Delimitation

Rather than treating each document as a homogeneous unit of analysis, this study isolates analytically relevant passages as the primary unit of analysis. Passages were identified through iterative close reading, guided by keyword markers (e.g., "trust," "confidence," "security," "safety," "reliability") and contextual indicators where trust is implied rather than explicitly stated.

A total of 14 passages were selected for in-depth coding. This number does not represent the total occurrences of trust-related language in the corpus; rather, it reflects theoretically saturated instances in which trust performs a clear functional role in mediating relationships between actors or systems. The selection follows a principle of analytical saturation rather than quantitative exhaustiveness: passages were included when they introduced a distinct configuration of trust function, actor relation, or governance logic not already captured in previously coded segments. To contextualise the scale of the underlying corpus: the seven documents span a combined total of approximately 890 pages. Preliminary keyword searches for "trust" and "confidence" across the full corpus, prior to purposive filtering, returned more than 340 raw instances. The 14 passages selected for in-depth coding therefore represent a deliberately filtered subset, retained because they activate these terms as functional governance mechanisms rather than as rhetorical filler or incidental usage. The full coded dataset is available upon reasonable request from the corresponding author.

Coding Framework

Each passage was coded across multiple dimensions to capture both its discursive and systemic properties. These dimensions include: (1) Source document and section; (2) Extracted quotation (anchor text); (3) Thematic label; (4) Functional role of trust; (5) Actor configuration (sender and receiver); (6) Domain (e.g., governance, market, technology, citizen); (7) Problem framing; and (8) Operational function of trust within the passage.

The coding process combined inductive and deductive approaches. Inductively, thematic categories were developed through repeated comparison across passages, resulting in five dominant themes: (T1) Trust as Adoption Prerequisite; (T2) Security as Trust's Proxy; (T3) Trust as Governance Outcome; (T4) Empowerment and Confidence as Policy Goals; and (T5) Erosion Risks. Deductively, these themes were interpreted through Luhmann's conceptual distinctions, particularly trust as complexity reduction and structural coupling between functionally differentiated systems.

Actor relations were further mapped into coupling dyads to identify how trust mediates interactions between systems (e.g., government–citizen, government–market, citizen–technology). This relational mapping allows the analysis to move beyond thematic categorisation toward a systemic understanding of how trust operates as a coupling mechanism.

Analytical Strategy

The analysis proceeds in three stages. First, coded passages are grouped thematically to identify dominant patterns in the construction of trust across the corpus. Second, actor-relation mapping is conducted to trace how trust enables or stabilises interactions between different domains. Third, implied assumptions embedded in the policy discourse are surfaced through critical discourse analysis, following Fairclough's (2003) principle that policy texts communicate both explicitly and through taken-for-granted presuppositions.

This multi-layered approach allows the analysis to move beyond what policy documents say about trust toward understanding how trust actually functions within the broader architecture of regional digital governance.

Validity and Limitations

Given the qualitative and interpretive nature of this study, validity is established through analytical transparency and theoretical coherence rather than statistical generalisability. The use of explicit coding dimensions, anchored textual excerpts, and systematic categorisation enhances the traceability of interpretations.

However, several limitations must be acknowledged. First, the corpus is selective and does not aim to exhaustively represent all ASEAN digital policy discourse. Second, the identification and coding of passages are interpretive acts shaped by the researcher's theoretical orientation, particularly the application of Luhmann's systems theory. Third, the analysis focuses on policy texts rather than implementation practices; as such, it captures the communicative construction of trust rather than its empirical realisation.

These limitations are consistent with the study's objective: to provide a systems-theoretical critique of how trust is operationalised within policy communication, rather than to evaluate the effectiveness of policy outcomes.

RESULT

Frequency and Thematic Distribution of Trust Discourse

The corpus analysis reveals that "trust" does not appear uniformly across the policy documents; its discursive density escalates in direct proportion to the degree of disruption a technology introduces and the degree of structural deficit it exposes. The most trust-saturated portion of the corpus is Desired Outcome 3 (DO3) of the ASEAN Digital Masterplan 2025, which generates five coded passages and five enabling actions (EA 3.1–3.5). DO3 addresses digital services, cybersecurity, data governance, AI, and e-commerce, precisely the domains where technical certainty is most elusive and where user exposure to systemic failure is highest.

Table 1. Thematic Distribution of Trust Functions Across the Policy Corpus

Theme	Passages (n)	Trust Function	Key Domains
T1, Trust as Adoption Prerequisite	3 (IDs 3, 7, 13)	Condition	Digital Services, e-Commerce, FinTech
T2, Security as Trust's Proxy	3 (IDs 4, 5, 9)	Tool	Cybersecurity, Critical Sectors
T3, Trust as Governance Outcome	4 (IDs 8, 10, 11, 14)	Tool + Value	Data Governance, AI Regulation
T4, Empowerment and Confidence	3 (IDs 1, 2, 12)	Value + Tool	AI Strategy, AI Ethics
T5, Erosion Risks	1 (ID 6)	Condition (fragile)	Data & AI, IoT

Source: Author's corpus coding from trust_analysis_dataset_v2 (2025)

The most striking finding in the thematic distribution is the near-total absence of the erosion risk theme (T5, n=1). Only one passage, drawn from the ADM 2025, explicitly acknowledges that technology can actively corrode trust: "the growing power to collect and analyse data has the potential to lead to an erosion of trust" (ASEAN, 2021b, pp. 66–67). This single passage is surrounded by seventeen passages that frame trust as something to be built, engineered, or restored. The asymmetry is analytically significant: the policy corpus dedicates vastly more discursive space to producing trust than to understanding why it might be legitimately withheld. This is consistent with Luhmann's observation that political systems prioritise their own self-reproduction, maintaining legitimacy, over critical self-assessment (Luhmann, 1995).

Trust as a Compensator for Structural Deficits

A critical examination of the policy corpus reveals a consistent rhetorical move: when structural deficits are acknowledged, the narrative pivots almost immediately to trust-building as the prescribed remedy, without resolving the underlying deficit. Four examples from the coded corpus illustrate this substitution mechanism.

First, in the domain of digital services and access (IDs 3, 13), the ADM 2025 acknowledges that adoption of digital services in health and finance depends on consumer trust, but the broadband connectivity gaps in rural ASEAN, which structurally prevent service access regardless of trust levels, are treated as a separate strategic thrust (DO2), decoupled from the trust discourse (ASEAN, 2021b, p. 65). The narrative effectively conflates "willingness to use" with "ability to access," obscuring the fundamental lack of physical infrastructure behind a confidence-building agenda. This corresponds to Implied Assumption A4 in the dataset: the taken-for-granted claim that trust is scalable, assuming that regional frameworks translate

directly to individual user experience, without addressing the material conditions that determine whether such scaling is even possible.

Second, in the domain of AI reliability (ID 12), the Malaysia AI Roadmap Playbook conditions trust in AI systems on their "reliable and safe" operation but does not define minimum reliability standards or establish independent verification mechanisms. The implied assumption (A8) is that trustworthiness is self-certified by developers. The policy discourse papers over a fundamental governance gap, namely the absence of an independent standard for when a system is trustworthy enough, covered with the language of voluntary ethical guidelines.

Third, in the domain of cross-border data governance (ID 8), the ASEAN Data Management Framework frames harmonised data governance as the mechanism to instill "trust, transparency and accountability" and to establish member states as "Trusted Data Partners." Yet the significant asymmetries between Singapore's PDPA-aligned regime and less-developed data protection frameworks in other AMS are not directly addressed. The invocation of mutual trust projects an image of regulatory equivalence that does not yet exist in material terms. Precisely the legitimation function Luhmann assigns to the political system's communication outputs (Luhmann, 1996; Mattheis, 2012).

Fourth, in the domain of institutional governance beyond the digital (ID 14), the Philippine Development Plan 2023–2028 extends the trust discourse to the justice system, asserting that a stable judiciary must "inspire trust and confidence through integrity, fairness, and accessibility." This passage reveals the ideological portability of the trust discourse: it migrates from technical cybersecurity into constitutional governance, performing the same substitution function, invoking trust as the aspirational solution to structural accountability deficits, across entirely different institutional domains.

Structural Coupling Through Trust: Actor-Relation Mapping

The dataset's actor-relation mapping identifies eight coupling dyads (R1–R8) across the corpus, of which six are operative (trust actively enables the coupling) and one is conspicuously absent (R8: citizen-to-government trust, or democratic accountability, is largely unaddressed in the corpus). The following table summarizes the five most analytically significant relations.

Table 2. Operative Trust-Coupling Relations in the ASEAN Digital Policy Corpus

Relation	Actor From	Actor To	Mechanism	What Trust Enables
R1	Government	Citizens	Governance, regulation, protection	Legitimises state authority over digital infrastructure
R2	Government	Market	Certification, compliance regimes	Regulates markets without direct command
R3	Citizens	Technology	Perception of safety and transparency	Users adopt AI/e-payments when systems are deemed safe
R4	Government	Government	Mutual recognition of data frameworks	Cross-border data flows and trade proceed
R5	Regulatory Bodies	Private Sector	Certification and audit	Private-sector trustworthiness made legible and auditable

Source: Author's actor-relation coding from trust_analysis_dataset_v2 (2025)

The most structurally consequential coupling in the corpus is R4: government-to-government trust across AMS borders, operationalized through the ASEAN Data Management Framework and ADM 2025's EA 3.3. The problem being addressed is regulatory asymmetry: member states operating under incompatible data protection regimes. The proposed solution, harmonised principles-based frameworks and mutual recognition of standards, is presented as a trust-building exercise. Trust here performs what Luhmann would call an intersystemic translation function: it allows the legal systems of different nation-states, each operationally closed, to generate shared expectations that enable cross-border data flows without requiring the unification of those legal systems (Luhmann, 1992).

The most conspicuous absence in the coupling map is R8: citizen-to-government trust, the direction of democratic accountability. The corpus addresses how governments build trust among citizens, but not how citizens hold governments accountable when that trust is violated. This is not a neutral omission. As Zucker (1985) observes, institutional trust requires not only that institutions produce consistent outputs but that they are embedded in accountability structures that constrain their behaviour. The absence of accountability mechanisms from the trust discourse is itself a form of structural coupling failure: the political system designs trust as a one-directional instrument of legitimation rather than as a reciprocal social relation.

DISCUSSION

The Policy Architecture of Engineered Trust

The findings of this corpus analysis confirm and extend the central theoretical proposition: that ASEAN's digital policy documents treat trust not as an organic social outcome but as a deliberately engineered functional substitute for structural deficits. This is the logic Luhmann identifies in the modern political system: faced with complexity it cannot reduce through direct action, the system produces communication that manages the expectations of its environment, stabilising the interactions that sustain its own reproduction (Luhmann, 1996).

A useful distinction helps clarify this dynamic precisely. Output-oriented communication systems are defined by the production and publication of policy guidelines: the discursive act of articulating standards, frameworks, and aspirational commitments. Outcome-oriented systems, by contrast, are measured by the actual, verified establishment of reciprocal societal trust, evidenced through demonstrable changes in citizen behaviour, institutional performance, and relational accountability. The ASEAN digital policy corpus operates almost entirely within the output-oriented register. It produces frameworks and declarations and then treats these outputs as functionally equivalent to the social outcomes they are designed to generate. This is precisely the self-referential logic Luhmann assigns to the political system: it validates its own communication outputs as indicators of systemic success while insulating itself from the empirical question of whether those outputs have produced the effects they claim (Luhmann, 1996). The result is a governance architecture that is rich in articulation and sparse in verification, and that substitutes the performance of trustworthiness for the evidence of it.

The five thematic categories identified in the corpus map directly onto Luhmann's typology of trust functions. Trust as Adoption Prerequisite (T1) corresponds to trust as a threshold for social interaction. Without it, the complexity of digital ecosystems overwhelms potential users and prevents participation. Trust as Security's Proxy (T2) reflects the political system's characteristic tendency to translate social problems into technical ones, a pattern Luhmann identifies as the functional differentiation of modern society, in which each specialised system

(here, the cybersecurity system) absorbs complexity from adjacent systems. Trust as Governance Outcome (T3) represents trust's role as a performance indicator for the political system, offering a way of measuring the quality of its own communications. Empowerment and Confidence (T4) foreground the citizen-facing dimension of trust production, consistent with Fukuyama's (1996) argument that social capital, of which trust is the foundational element, is a precondition for economic flourishing. And the Erosion Risk theme (T5), systematically underweighted in the corpus, points to the fragility of trust as a systemic coupling medium: trust collapses rapidly under conditions of opacity, inequality, or demonstrated bad faith, yet the policy documents rarely account for this dynamism (Abidin et al., 2025).

Five Cross-Domain Coupling Examples

Examining how trust reduces uncertainty when government, market, and technology domains must coordinate yields five analytically distinct mechanisms, each drawn from the corpus.

First, government and technology couple through the zero-trust architecture model (ID 9) UN E-Government Survey 2024). South Korea and Singapore have adopted the zero-trust security principle, "never trust, always verify," as state-level digital governance doctrine. This represents an inversion of the typical trust narrative: rather than building trust, the political system institutionalises the permanent suspension of trust as a cybersecurity posture. In Luhmannian terms, this is a structural coupling that uses the technology system's own operational logic (continuous authentication) to manage the political system's uncertainty about the integrity of its digital infrastructure.

Second, government and market couple through sector certification frameworks (ID 5, ADM 2025 EA 3.2). The ADM 2025 commits to certification frameworks for finance, healthcare, education, and government by 2022–2024. These frameworks function as structural interfaces: the political system (which produces standards) and the economic system (which must comply to access markets) develop shared expectations without requiring the unification of their operational logics. Certification makes trust legible and exchangeable, translating the social quality of trustworthiness into a technical and legal category that both systems can process on their own terms.

Third, government and citizens couple through e-payment security provisions (ID 13, Philippine Development Plan 2023–2028). The Philippine plan prescribes secure e-payment systems as the mechanism for promoting "trust and confidence in the digital uptake." This is trust as a psychological bridge across the digital divide, enabling participation in a digitally available service (e-payments) that citizens would otherwise refuse to use due to perceived or experienced insecurity. The complexity being reduced is the citizen's uncertainty about financial risk; trust performs the cognitive function Luhmann assigns to it, substituting for verification where verification is impossible for lay users.

Fourth, national governments couple with one another through integrated AI governance frameworks (ID 10, UN E-Government Survey 2024). The Survey recommends integrating AI governance within existing digital frameworks to prevent the fragmentation that erodes public confidence. The problem is jurisdictional complexity: divergent national AI regulatory regimes create uncertainty for cross-border actors. Trust here is an output of coherence: consistent, integrated governance frameworks collectively generate more systemic trust than any single national framework can produce in isolation. This is structural coupling at the inter-systemic

level, where the political systems of different nation-states find shared interfaces to manage complexity that none can absorb individually (Luhmann, 1992).

Fifth, the technology domain functions as a foundational substrate for all other coupling relations (R7 in the dataset). The ADM 2025 and Singapore's NAIS 2.0 converge on the proposition that security infrastructure (encryption, DNSSEC, TLS protocols, CSIRT coordination) as the material precondition for the social construct of trust to operate. However, as Implied Assumption A5 in the dataset identifies, the corpus consistently conflates technical security with social trust. Communities with historical reasons to distrust state institutions may not extend trust simply because security protocols are in place, a dynamic particularly salient in contexts of prior state violence or exclusion (Abidin et al., 2025; Jati, 2017).

A contextually significant variation in trust discourse emerges when Singapore's National AI Strategy 2.0 (NAIS 2.0) is read alongside the Philippine Development Plan 2023–2028. Despite both documents invoking trust as a central governance objective, they do so from vastly different infrastructural starting points, and this difference leaves a discernible imprint on the texture of their trust narratives. NAIS 2.0 deploys trust primarily as a precision instrument. It addresses the concerns of an already digitally engaged population, calibrating public confidence toward specific AI applications through commitments to explainability, model governance, and regulatory sandboxes. The assumption embedded in this discourse is that the foundational infrastructure of digital participation, including reliable connectivity, institutional credibility, and legal recourse, is already in place. The Philippine Development Plan operates under no such assumption. Its trust discourse is broader, more foundational, and more structurally burdened: it must simultaneously cultivate confidence in basic digital payment systems and in the integrity of the judiciary that would adjudicate disputes arising from those systems. Trust in this context functions not as a precision calibration tool but as a load-bearing structural element, substituting for absent infrastructure, underdeveloped regulatory enforcement, and historically rooted institutional skepticism. This comparison reveals that the ASEAN regional trust vocabulary, while superficially uniform across member-state documents, encodes divergent governance logics shaped by each state's structural position within the regional digital economy.

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The comparison between Singapore's National AI Strategy 2.0 (NAIS 2.0) and the Philippine Development Plan 2023–2028 illustrates how the trust narrative shifts meaningfully depending on baseline infrastructure conditions. Singapore's NAIS 2.0 deploys trust discourse from a position of institutional strength: high broadband penetration, a mature data protection framework (PDPA), and a well-developed AI research ecosystem. Here, trust is largely prospective and market-facing, oriented toward ensuring that advanced AI systems remain explainable, auditable, and aligned with social values as the digital economy continues to mature. The structural baseline is largely secure; the challenge is managing reputational and ethical risk at the frontier of innovation. The Philippine Development Plan, by contrast, operationalises trust discourse from a context where basic digital infrastructure and financial inclusion remain structurally uneven. In this setting, trust is not a refinement of an already-functioning system but a prerequisite threshold: without it, e-payment adoption stalls, digital public services go unused, and the plan's broader socioeconomic objectives become unreachable for large segments of the population. The same term, deployed in both documents, thus carries fundamentally different functional weight. Singapore mobilises trust to manage the risks of technological sophistication; the Philippines mobilises it to compensate for material deficits in access and capability. Recognising this intra-regional variation is essential for evaluating whether the ASEAN trust-building framework is genuinely responsive to the heterogeneous conditions of its member states, or whether it projects a regional coherence that does not yet exist in practice.

Implied Assumptions and Critical Limits

The most analytically significant contribution of this study lies not only in what the ASEAN digital policy corpus says about trust, but in what it takes for granted. The dataset surfaces fourteen implied assumptions (A1–A14) embedded in the corpus. Several merit extended critical attention.

Assumption A1, the premise that trust is a problem of design rather than politics, is perhaps the most consequential. By treating trust as an engineering challenge to be solved through technical standards and governance frameworks, the corpus systematically excludes the political economy of trust: the question of who benefits when citizens extend trust to digital systems, and who bears the cost when that trust is violated (A14). This exclusion is not innocent; it protects incumbent actors, both state institutions and large technology companies, from accountability for the trust they claim to be building.

Assumption A5, the equation of security with trust, conflates two analytically distinct phenomena. Mayer et al. (1995) demonstrate that trust requires perceived ability, benevolence, and integrity; technical security can provide evidence of ability, but it says nothing about benevolence or integrity. A government that deploys sophisticated encryption while conducting surveillance of its own citizens may be technically secure and socially untrustworthy simultaneously. The corpus's consistent equation of the two forecloses this distinction.

Finally, Assumption A13, the interchangeable use of "confidence" and "trust," represents a conceptual collapse that weakens the entire policy architecture. Luhmann's distinction is precise: confidence is the default assumption of stability; trust is a voluntary exposure to risk. A policy framework that cannot distinguish between the two cannot design appropriate

interventions for either. It will build security infrastructure (a confidence-building measure) when what is needed is relational accountability (a trust-building measure), and vice versa.

CONCLUSION & RECOMMENDATION

This article has demonstrated that trust in ASEAN's digital policy corpus is not an organic social outcome but a deliberately engineered functional substitute for structural deficits in digital infrastructure, regulatory capacity, and cross-border governance coherence. Through the application of Luhmann's Social Systems Theory and systematic corpus coding of 14 passages across seven policy documents, the analysis has established three principal findings.

First, trust discourse is distributed asymmetrically across the corpus, concentrated in precisely the domains where structural deficits are most pronounced. Its density is a reliable indicator of underlying governance anxiety rather than of genuine systemic confidence. Second, trust performs six distinct operative coupling functions across government, market, citizen, and technology domains, functioning variously as an adoption prerequisite, a security proxy, a governance outcome, and a legitimation instrument. Third, and most critically, the corpus systematically underweights the erosion risk of trust, omits the accountability dimension of citizen-to-government trust, and conflates technical security with social trustworthiness, representing three analytical failures that will weaken the very digital governance architecture the documents seek to build.

These findings carry implications beyond the ASEAN context. They speak to the broader challenge facing regional governance bodies that must coordinate structurally heterogeneous members without supranational authority: the temptation to substitute narrative legitimation for material reform is structurally built into the governance model itself. The Luhmannian framework reveals why this is the case and why addressing it requires more than better policy drafting. It requires the design of genuine accountability mechanisms that make trust bidirectional: not only governments building confidence among citizens and markets, but citizens and markets holding governments accountable for the trustworthiness they claim.

For practitioners and policymakers, this analysis offers three actionable recommendations. First, ASEAN governance frameworks should develop explicit trust measurement instruments that go beyond cybersecurity metrics to capture relational and institutional dimensions of trust, including citizen-reported confidence, experience of data rights violations, and perceived government accountability. Second, the corpus's equation of security infrastructure with social trust should be disaggregated in future policy iterations, with distinct interventions designed for technical security (which addresses ability) and relational governance (which addresses benevolence and integrity). Third, the systematically underweighted theme of trust erosion risk should be elevated to a primary governance concern, with specific provisions for how ASEAN will respond when trust collapses, as it will, in one or more member-state contexts.

Future research should extend this corpus analysis to member-state implementation reports, examining whether the trust discourse in regional frameworks is reproduced, diluted, or critically adapted at the national level. Comparative analysis with other regional governance bodies, including the European Union's GDPR governance framework or the African Union's data governance architecture, and these comparisons would further illuminate the relationship between governance model, structural capacity, and the discursive role of trust.

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