

The Hybrid Specialization Model: Navigating Bureaucratic Rigidity through GovTech Co-creation in Indonesia

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ABSTRAK

Penelitian ini menginvestigasi bagaimana perusahaan GovTech menavigasi rigiditas birokrasi untuk mempercepat kematangan digital pada pemerintah daerah di Indonesia. Studi ini mengkaji evolusi kebutuhan klien, operasionalisasi tata kelola kolaboratif, dan desain struktural dari "Hybrid Specialization Model" dalam kerangka Sistem Pemerintahan Berbasis Elektronik (SPBE). Menggunakan desain studi kasus kualitatif tunggal pada kemitraan antara PT 4nesia Digital Solution dan Pemerintah Kota Cirebon, data ditriangulasi melalui wawancara semi-terstruktur, observasi lapangan, dan laporan evaluasi SPBE longitudinal. Hasil menunjukkan pergeseran dari pengadaan teknis menuju legitimasi institusional, didorong oleh kepatuhan terhadap indikator SPBE nasional. Keberhasilan bergantung pada kepemimpinan fasilitatif untuk menjembatani silo sektoral. Hybrid Specialization Model yang diusulkan meningkatkan Indeks SPBE dari 3,17 menjadi 4,13, meskipun kesenjangan keberlanjutan tetap ada yang memerlukan kodifikasi alur kerja digital ke dalam kebijakan daerah. Penelitian ini memberikan bukti empiris untuk value co-creation dan menawarkan cetak biru strategis untuk beralih dari hubungan transaksional ke kemitraan yang terinstitusionalisasi.

Kata kunci: *GovTech; SPBE; Hybrid Business Model; Collaborative Governance; Value Co-creation; Indonesia.*

ABSTRACT

This study investigates how GovTech firms navigate bureaucratic rigidity to accelerate digital maturity in Indonesian local government. It examines the evolution of client needs, the operationalization of collaborative governance, and the structural design of a "Hybrid Specialization Model" within the Electronic-Based Government System (SPBE) framework. Utilizing a qualitative single-case study of the partnership between PT 4nesia Digital Solution and Cirebon City, data were triangulated through semi-structured interviews, field observations, and longitudinal SPBE evaluation reports. Results indicate a shift from technical procurement toward institutional legitimacy, driven by compliance with national SPBE indicators. Success depends on facilitative leadership to bridge sectoral silos. The proposed Hybrid Specialization Model boosted the SPBE Index from 3.17 to 4.13, though a sustainability gap persists requiring the codification of digital workflows into local policy. This research provides empirical



evidence for value co-creation and offers a strategic blueprint for shifting from transactional relations to institutionalized partnerships.

Keywords: *GovTech; SPBE; Hybrid Business Model; Collaborative Governance; Value Co-creation; Indonesia.*

INTRODUCTION

Digital transformation in the public sector has evolved from simple process mechanization toward the development of complex innovation ecosystems. This shift requires fundamental changes in both organizational culture and business models to move beyond mere technical adoption. In Indonesia, this agenda is formalized through Presidential Regulation No. 95 of 2018 concerning the Electronic-Based Government System (SPBE). However, local implementation remains severely fragmented, characterized by "siloed" data management and a lack of standardized business processes. This structural bottleneck often leads to a phenomenon of "isomorphic mimicry," where local governments adopt digital tools primarily to satisfy regulatory compliance and institutional legitimacy rather than to transform public service delivery.

Current literature suggests that collaborative governance is essential for addressing such "wicked problems," emphasizing the need for public and private stakeholders to engage in consensus-oriented decision-making. While existing studies highlight the importance of strategic partnerships and the role of intermediaries in digital government, there is a significant research gap regarding the specific structural design of GovTech business models required to navigate the unique rigidities of Indonesian local bureaucracy. Most research focuses on general success factors or technical infrastructure maturity, yet fails to provide a detailed analysis of how a consulting firm can balance methodological specialization with the administrative and regulatory constraints of a client. There is a lack of empirical evidence on how these collaborative arrangements can be operationalized to move beyond transactional "build and leave" relationships toward institutionalized partnerships.

This study addresses this gap by investigating the partnership between PT 4nesia Digital Solution and the Cirebon City Government, exploring how a "Hybrid Specialization Model" can effectively bridge technical and bureaucratic divides. The research aims to analyze how multidimensional government needs are translated into value propositions and how collaborative governance is operationalized through facilitative leadership and trust-building. The primary theoretical contribution of this study lies in the extension of Luvison's (2019) hybrid business model framework and its integration with Public Service-Dominant Logic (PS-DL). By demonstrating that public value evidenced by the surge in Cirebon's SPBE Index is a co-created outcome rather than a static vendor deliverable, this research offers a strategic blueprint for shifting from New Public Management toward a more collaborative and institutionalized New Public Governance framework

METHODOLOGY

Research Design and Case Selection This study employs a descriptive qualitative single-case study design. The research locus is the Electronic-Based Government System (SPBE) Architecture project in Cirebon City, conducted in partnership with PT 4nesia Digital Solution. This specific case was selected as a "positive anomaly" or deviant case; while many local governments struggle with digital fragmentation, this collaboration resulted in a significant

surge in the SPBE Index from 3.17 to 4.13, surpassing the national average. The objective of this design is to achieve analytical generalization rather than statistical representativeness, investigating the underlying mechanisms of the "Hybrid Specialization Model" within a rigid bureaucratic context.

Data Collection and Triangulation To ensure validity and mitigate selection bias, data were collected through source and technique triangulation. The primary data sources include:

- **Semi-Structured Interviews:** In-depth interviews were conducted with five key informants selected through purposive sampling. These included two internal strategists from PT 4nesia to capture the provider's perspective and three executive-level officials from the Cirebon City Government to capture the client's strategic needs.
- **Non-Participatory Observations:** To capture the operational and technical dynamics often overlooked at the executive level, the researchers observed three workshop sessions dedicated to preparing architectural documents and business processes (BPMN). This allowed for the observation of interactions between consultants and operational staff.
- **Document Analysis:** A total of 12 strategic documents were reviewed, including Terms of Reference (TOR), Memoranda of Understanding (MoU), weekly project logbooks, and the official SPBE Evaluation Result Reports (LHE). The project logbooks were particularly vital for tracking informal "bottom-up" engagements and the "jempuk bola" (proactive) behaviors of the project team.

Data Analysis Procedures Data were analyzed using NVivo 14 software, following the Miles, Huberman, & Saldaña (2014) model of data reduction, display, and verification. The analysis proceeded through three coding stages:

1. **Open Coding:** Identifying initial concepts related to bureaucratic barriers, such as "institutional ego" and "personnel turnover".
2. **Axial Coding:** Relating categories to the core dimensions of Collaborative Governance (e.g., facilitative leadership) and the Hybrid Business Model (e.g., value propositions).
3. **Selective Coding:** Refining the "Hybrid Specialization Model" as the central phenomenon that balances technical methodology with administrative context.

Methodological Rigor and Trustworthiness The study addressed trustworthiness and researcher reflexivity by cross-verifying interview claims against longitudinal government reports (LHE) to ensure the findings were not merely promotional. Analytical validity was maintained by ensuring consistency across the three data types; for example, the reported increase in digital maturity was evidenced by both informant testimony and official national evaluation scores. Theoretical saturation was achieved when the analysis of the 12th document and the final workshop observation reinforced established patterns of "symmetrical resistance" and "compliance-driven" behavior without producing new thematic categories.

RESULTS AND DISCUSSION

Theoretical Integration: Collaborative Governance and Hybrid Business Models Unlike traditional public sector management, digital transformation in a decentralized context like Indonesia requires a dual-layered framework. This study integrates Collaborative Governance (CG) as the procedural framework and the Hybrid Business Model (HBM) as the structural framework, bridged by Public Service-Dominant Logic (PS-DL). While CG addresses how stakeholders engage in consensus-oriented decision-making, the HBM operationalizes how these actors balance their distinct specializations technical and administrative to co-create value. This integration moves the discussion beyond standalone constructs, arguing that the success of GovTech projects depends on the alignment between collaborative processes and the business structures that support them.

Multidimensional Client Needs: From Technical Assets to Institutional Legitimacy The findings reveal that government requirements have shifted from the mere procurement of technical outputs toward the acquisition of institutional legitimacy. Analysis of NVivo 14 coding shows that the "Compliance" dimension emerged as the most frequent and dominant theme, appearing significantly in the Terms of Reference (TOR) and interviews with the Head of the Communication and Informatics Department (Diskominfo).

The characterization of the consultant as a "regulatory translator" is empirically grounded in the client's insistence on aligning digital architectural drafts with national SPBE evaluation indicators rather than technical infrastructure features. As one informant noted, the government requires a partner who understands "bureaucratic language" to bridge the gap between abstract national mandates and local technical implementation. This behavior supports the theory of isomorphic mimicry, where the adoption of technology is driven by the pressure to satisfy regulatory standards and secure institutional standing. Thus, the consultant's value proposition is not an "off-the-shelf" IT product, but a strategic bridge to institutional compliance.

Collaboration Strategy Dynamics: Culturally-Specific Facilitative Leadership The operationalization of collaborative governance in this case is driven by a mechanism known locally as "jemput bola" (proactive engagement). While the Project Manager (PM) is a central figure, this behavior is not merely an individual trait but a culturally-specific manifestation of facilitative leadership designed to navigate Indonesian bureaucratic silos. Project logbooks indicate that informal engagements far outnumbered formal meetings, suggesting that in a rigid hierarchical structure, trust-building occurs primarily through face-to-face dialogue and interpersonal rapport.

However, this leadership does not operate in a vacuum. The effectiveness of the "jemput bola" approach was contingent upon institutional "Leadership Commitment" from city executives, which provided the necessary political space for the consultant to mediate across fragmented Regional Apparatus Organizations (OPDs). By theorizing "jemput bola" as a mediator for "institutional ego," this study extends collaborative governance literature to include informal cultural maneuvers as essential tools for digital transformation in decentralized bureaucracies.

Business Model Transformation: The Hybrid Specialization Model as Co-creation The proposed Hybrid Specialization Model represents a shift from transactional "Principal-Agent" relations toward Value Co-creation. To avoid attribution bias, it is critical to note that the surge in Cirebon’s SPBE Index (from 3.17 to 4.13) was not a solo achievement by the consultant, but a co-created outcome. As shown in Table 1, the model is built on complementary specialization: PT 4nesia provided the methodological expertise, while the local government provided the indispensable administrative and regulatory context.

Table 1 Triangulation Synthesis: Comparison of GovTech Consulting Business Models"

Dimension	Analytical Derivation	Empirical Evidence
Value Proposition	From technical output to institutional outcome	SPBE LHE Document (Index 3.17 to 4.13)
Key Activities	Integration of users into the design process	BPMN Workshop Observations
Partnership Logic	Government as a "Core Team" co-designer	Director Interview & MoU Analysis

Source: Research data, processed (2024)

The model positions the GovTech firm as a "co-architect" rather than a vendor. By embedding the consultant within the city’s long-term roadmap, the model addresses technical gaps such as unstable infrastructure and limited security through institutionalized planning rather than ad-hoc fixes.

Sustainability Risks: The Institutionalization Gap Despite the model’s success, data triangulation reveals a sustainability gap. The high annual personnel turnover rate (30%) and the absence of local regulations (Perwali) to formalize digital workflows threaten to "reset" these gains. This empirical finding highlights that without shifting the focus from individual empowerment to institutional stabilization, the value co-created remains transient. Consequently, the "Hybrid Specialization" must evolve to include the "hard coding" of digital processes into regional policy to ensure that digital maturity survives personnel rotations

SOLUTIONS AND RECOMMENDATIONS

While the Hybrid Specialization Model addresses immediate implementation hurdles, data triangulation reveals systemic threats to the long-term sustainability of these digital gains. High personnel turnover is the primary structural barrier to maintaining SPBE maturity. The transition from individual capability to institutionalized process remains fragile. A document analysis of the Cirebon City SPBE Team Decree indicates an annual personnel turnover rate of approximately 30%.

Table 2. Triangulation of Inhibiting Factors in GovTech Collaboration

Barrier Category	Literature (General Public Sector)	Empirical Findings
Human Capital	Lack of digital literacy	High personnel turnover (30% annually)
Organizational	Institutional Ego	Symmetrical resistance from middle-management
Regulatory	Lack of standards	Absence of local "Perwali" for system permanence

Source: Research data, processed (2024)

Without formalizing the collaborative outcomes into local regulations, the success achieved risks becoming a transient success that erodes as trained personnel rotate out of their positions. For a hybrid business model to be truly effective in the Indonesian context, the value proposition must shift from individual empowerment to institutional stabilization. This necessitates moving beyond training sessions toward the hard coding of digital workflows into regional policy and independent automated systems.

Based on these findings, it is recommended that Local Government Leaders (Regents/Mayors) ensure that every SPBE architectural draft produced by consultants is immediately formalized into a Regional Regulation (Peraturan Daerah) or Mayoral Decree (Perwali). This prevents the "reset" of progress during personnel rotations. Furthermore, procurement strategies should move toward "Value-Based" procurement that rewards institutional empowerment. GovTech Consulting Firms should adopt the "Partner-as-Core-Team" logic, investing in Project Managers with facilitative leadership, and making the "Empowerment Index" of the client a key performance indicator.

FUTURE RESEARCH DIRECTIONS

The study's generalizability is limited by its focus on a single case study in a region with supportive leadership. Collaboration dynamics may vary in areas with wider digital divides or lower leadership commitment. Furthermore, the analysis focuses on business processes and has not yet measured the direct impact on citizen satisfaction as the ultimate end-user.

Future research should pursue longitudinal studies to evaluate the sustainability of the SPBE Index after the consulting engagement concludes. Comparative research involving a broader spectrum of GovTech entities is needed to test the scalability of the Hybrid Specialization Model. Finally, integrating socio-economic impact analyses would provide a more holistic view of how these collaborative digital transformations translate into broader public welfare.

Future research could also build on Khansya and Santoso's (2025) quantitative analysis of digital leadership and organizational outcomes by examining how different configurations of Hybrid Specialization affect employee-level performance and commitment indicators in SPBE projects. Similarly, longitudinal comparisons with other SPBE architecture initiatives, such as the Purwakarta case studied by Alghifary et al. (2023), would help assess whether the Hybrid Specialization Model is robust across different infrastructural baselines and governance contexts.

CONCLUSION

This study refines collaborative business models in the public sector by extending Luvison's (2019) framework, demonstrating that successful transformation requires synthesizing rigid methodological specialization with fluid operational integration. It provides empirical validation of Collaborative Governance, confirming that digital success is highly dependent on facilitative leadership, face-to-face dialogue, and trust-building mediated by external partners to overcome resistance. Furthermore, it advances Public Service-Dominant Logic by demonstrating that public value, represented by the SPBE Index, is an outcome "created together" rather than delivered by a vendor. This shifts the paradigm from transactional New Public Management toward a collaborative New Public Governance framework.

COMPETING INTERESTS

The authors of this publication declare there is no conflict of interest.

FUNDING AGENCY

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

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