Orchestrating Corporate Entrepreneurship: Transforming Large Corporations through Ambidexterity and Innovation Ecosystems for Sustainable Competitiveness

Penelitian Thought Leadership

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Abstract

This study asks what becomes visible when organizational ambidexterity is analyzed at the corporate-portfolio rather than the single-firm level, and how institutional–market position and relative technology-speed conditions relate to the distribution of exploration and exploitation. We analyze 100 annual report documents from 11 entities in the Pertamina, PLN, and Telkom corporate groups between 2015 and 2025 using longitudinal hybrid computational and human content analysis. The coding architecture evaluates 19 conceptual components: five ambidexterity dimensions, six state-logic and five market-logic sub-constructs, and three technology-speed components. Directional coding of exploration and exploitation, combined with a 2×2 contextual matrix, yields 27 coding channels. Two independent analytical layers are combined: an ambidexterity continuum that captures each entity's relative exploration–exploitation orientation and a contextual matrix that positions entities by institutional–market conditions and relative technology-speed evidence. The findings show that portfolio-level ambidexterity is not a single organizational balance but can emerge through distinct architectures in which exploratory and exploitative roles are specialized, differentiated, or redistributed across corporate entities. These architectures can evolve through subsidiary-to-parent convergence, parent-to-subsidiary convergence, or persistent complementary separation rather than uniform movement toward a common position. External conditions create pressures and opportunities for renewal but do not mechanically determine organizational behavior: market-facing entities exposed to faster technological change may remain exploitative, while institutionally embedded entities may become more exploratory. We identify a context-to-mandate mechanism in which institutional–market position and technological dynamism condition the need for renewal, while corporate mandate, autonomy, and governance shape how these pressures are translated into exploration or exploitation. The study advances interentity ambidexterity as a portfolio-level architecture, reveals dynamics obscured by firm-level analysis, and develops quadrant-specific propositions for how ambidexterity may evolve under different external pressure regimes.

Keywords: *Organizational ambidexterity; Interentity ambidexterity; Holding and subsidiary portfolio; Institutional logic; Technological dynamism*

Introduction

Exploration and exploitation sustain current performance while renewing future capabilities, yet compete for attention and resources (March, 1991). Structural, contextual, and sequential ambidexterity address this tension within the firm (Tushman & O'Reilly, 1996; Gibson & Birkinshaw, 2004; O'Reilly & Tushman, 2013). Multiunit research shows that exploration and exploitation can span units and boundaries, and that parents continue to shape subsidiaries (Jansen et al., 2012; Kauppila, 2010; Feldman, 2021). Less is known about corporate groups, especially state-owned enterprises (SOEs), where these roles are distributed across legally distinct, commonly owned entities facing different institutional and market positions (Besharov & Smith, 2014) and different technological dynamism (Tushman & Anderson, 1986). This study addresses three gaps. First, it shifts the unit of analysis to the corporate portfolio, asking whether distributing exploratory, exploitative, and bridging roles across controlled entities constitutes interentity ambidexterity. Second, it links each entity's external conditions to the holding mechanisms (mandates, capital allocation, autonomy) that shape its role. Third, it uses a 2 × 2 matrix of institutional/market position and technological dynamism to examine how contextual change corresponds with shifts along the ambidexterity continuum over time. The question moves from how one firm balances exploration and exploitation to how a corporate system allocates, protects, and recombines them across entities under different external pressures.

Research Method

This study uses a longitudinal, theory-driven content analysis combining computational retrieval with human validation. The corpus comprises 100 annual reports (2015–2025) from 11 entities in three Indonesian state-owned groups (Telkom, PLN, Pertamina), analyzed at the company-year level in Indonesian and English. Two layers are built independently. First, ambidexterity is measured across five dimensions (strategic intent, customer and market coupling, knowledge search, resource allocation, and organizing architecture) using a frozen master codebook and company-specific dictionaries. Keywords only retrieve candidate passages, which are validated in context. Exploration and exploitation scores are the share of eligible narrative pages containing validated evidence; a continuum (−1 to +1) captures direction and joint intensity captures simultaneous activity. Second, each observation is placed in a 2 × 2 matrix: a horizontal index of market versus state logic, and a vertical index of relative technology-speed evidence with group-specific median cut lines. Reliability is assessed through independent double coding (Krippendorff's alpha, target ≈ 0.80), precision, recall, and F1 against a human benchmark, and robustness checks.

Every score is traceable to a page-level evidence ledger. The design supports longitudinal comparison and theory development, not causal inference.

Table 1. Operationalization of the Five Dimensions of Organizational Ambidexterity

Dimension	Exploitation	Exploration	Core distinction
Strategic Intent & Value Logic	Efficiency, stability, returns from established businesses	Renewal, new businesses, future capabilities	Current value vs. future value creation
Customer & Market Coupling	Existing customers and markets	New customers, markets, and channels	Established vs. new market domains
Knowledge & Technological Search	Refinement of existing knowledge and technology	Experimentation, R&D, emerging technologies	Local vs. distant search
Resource Allocation & Investment Horizon	Maintenance, optimization, predictable returns	New technologies, ventures, and uncertain long term investments	Near term certainty compared with future uncertainty
Organizing Architecture & Control	Formalization, centralization, standardization	Autonomy, agility, flexible structures	Control vs. experimentation

Discussion & Result

Ambidexterity Continuum across Holding–Subsidiary Portfolios

The three groups follow different trajectories. Pertamina Holding moved from −1.000 in 2015 to +0.178 in 2025. Exploration first appeared in technological search (the 2017 Research and Technology Center), then reached strategic intent through the 2022 Dual Growth Strategy. PHE remained exploitation-leaning (−0.524), while PNRE (+0.046) and PGN (−0.025) stayed near balance. In Telkom, exploration became visible first in Metranet (+0.224 in 2024) and Telkomsel (+0.120, sustained from 2021 with 5G and INDICO), and later in the holding (−0.433 to +0.148). In PLN, the holding remained exploitation-leaning (−0.843 to −0.237), ICON Plus shifted sharply to exploration (+0.612) after ICONNET and the Beyond kWh transformation, and EPI (−0.038) and Nusantara Power (−0.001) held balanced, bridging positions.

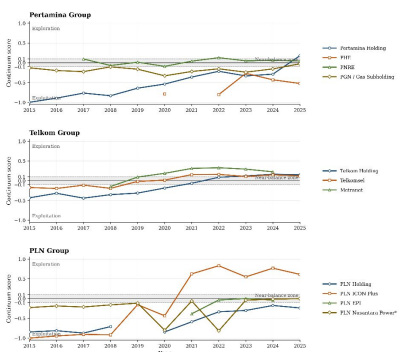
Institutional–Market Position and Relative Technology-Speed Matrix

Parents carry the broadest institutional evidence, while subsidiaries sit mostly on the market side. The PLN and Pertamina parents are institutionally oriented in nearly every observed year, whereas all Telkom entities are market oriented, with the holding closest to the X cut line (X between 0.03 and 0.37). The content of institutional evidence differs by sector: subsidies, tariffs, and electrification in PLN; fuel and LPG obligations in Pertamina; interconnection regulation and ownership in Telkom. Subsidiaries show institutional evidence in two forms: a sector-specific regulatory interface without public-service duties (PHE, EPI, Nusantara Power) or an assigned public mandate (PGN, PNRE), which accompanies movement toward the parent's position. Y cut lines are group-specific medians, so faster and slower positions are relative within each group.

Integrating the Ambidexterity Continuum and the 2×2 Matrix

Combining both layers yields three configurations. Pertamina shows subsidiary-to-parent convergence in contextual position while roles stay differentiated (PHE exploitative, PNRE and PGN bridging, parent more exploratory). Telkom shows parent-to-subsidiary convergence: the holding enters Telkomsel's quadrant in 2024–2025 as exploration becomes visible in the core. PLN shows persistent complementary separation: the parent remains institutional and relatively exploitative, ICON Plus remains market oriented and strongly exploratory, and EPI and Nusantara Power bridge the two. Similar contextual positions accompany different orientations (PHE, PLN Holding), and persistent contextual distance coexists with coherent role allocation.

The three results build one argument. The continuum shows that no group balances exploration and exploitation by making every entity balanced. Roles are distributed: PHE and the PLN holding protect incumbent performance, ICON Plus and Metranet carry renewal, and entities such as PGN, PNRE, EPI, and Nusantara Power connect the two. This is consistent with interentity ambidexterity as a portfolio-level architecture, where balance arises from how roles are allocated across legally distinct entities rather than from each entity's internal mix.



The matrix explains why entities under one parent face different conditions: institutional exposure and technology pressure vary by entity and by sector. But context alone does not account for the roles in continuum, because entities in the same quadrant hold different orientations. The integration points to a context-to-mandate mechanism: external conditions shape the pressure for renewal, and the parent's mandate, autonomy, and resource allocation appear to translate that pressure into exploratory, exploitative, or bridging roles. We propose this as an interpretation, not a tested causal effect.

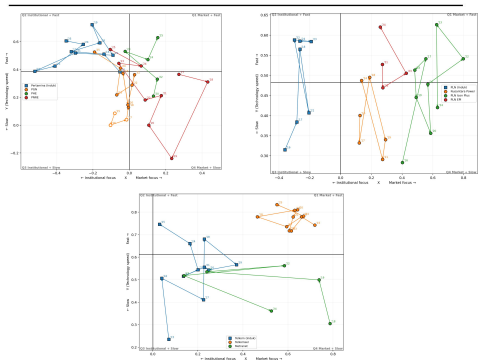
The three configurations show that corporate coherence can arise through convergence in either direction or through sustained complementary separation, so similarity of position is not the test of coherence. The quadrant-specific propositions follow from this: governance should separate genuinely new-domain exploration from incumbent digitalization, protect exploratory mandates under public obligations, and reassess role allocation when institutional exposure, technology pressure, or mandate changes.

Table 2. Summary of Longitudinal Ambidexterity Trajectories across SOE Holding and Subsidiary Portfolios

Group	Company	Initial position	Main trajector	Latest available score	Latest position
Pertamina	Pertamina Holding	−1.000 (2015)	Persistent exploitation gradually shifts toward exploration	+0.178 (2025)	Exploration leaning
	Pertamina Hulu Energi (PHE)	−0.788 (2020)	Consistently exploitation dominant; temporary moderation in 2023	−0.524 (2025)	Exploitation leaning
	Pertamina NRE (PNRE)	+0.095 (2017)	Predominantly balanced; temporary exploration tilt in 2022	+0.046 (2025)	Balanced
	PGN / Gas Subholding	−0.128 (2015)	Gradual movement from exploitation toward balance	−0.025 (2025)	Balanced
Telkom	Telkom Holding	−0.433 (2015)	Exploitation to balance to exploration	+0.148 (2025)	Exploration leaning
	Telkomsel	−0.173 (2015)	Exploitation to balance to sustained exploration	+0.120 (2025)	Exploration leaning
	Metranet	−0.148 (2018)	Early transition into sustained exploration	+0.224 (2024)	Exploration leaning
PLN	PLN Holding	−0.843 (2015)	Persistent exploitation with gradual movement toward the center	−0.237 (2025)	Exploitation leaning
	PLN ICON Plus	−1.000 (2015)	Sharp structural shift from exploitation to exploration after 2020	+0.612 (2025)	Exploration leaning
	PLN Energi Primer Indonesia	−0.384 (2021)	Rapid transition from exploitation to sustained balance	−0.038 (2024)	Balanced
	PLN Nusantara Power	−0.228 (2015)	Exploitation with shocks in 2020 and 2022, followed by convergence toward balance	−0.001 (2025)	Balanced

Table 3. Quadrant-specific propositions and governance implications of the institutional–market × relative technology-speed matrix.

Quadrant and contextual pressure regime	Theory-building proposition	Governance implication
Market orientation and faster technology	P1. Exploration becomes more likely when the mandate extends into genuinely new domains; where technology is used mainly to optimize an incumbent system, exploitation can remain dominant.	Separate new-domain exploration from incumbent digitalization. Give genuinely exploratory entities greater autonomy; faster capital access, and uncertainty-tolerant evaluation, while retaining efficiency and reliability metrics for incumbent systems.
Institutional orientation and faster technology	P2. When strong renewal pressure coexists with regulatory, reliability, or public obligations, exploration is more likely to be carried through differentiated mandates than through a uniform shift of the institutional core.	Protect exploratory mandates with ring-fenced resources and differentiated evaluation while maintaining reliability, compliance, and public-service guardrails in the core.
Institutional orientation and slower technology	P3. Exploitative and reliability-oriented roles are likely to persist, while renewal depends on sensing capability and option building until technology pressure or mandate changes increase the need for exploration.	Maintain current-performance discipline while preserving technology sensing, selected future options, and a defined pathway for activating exploration when conditions change.
Market orientation and slower technology	P4. Commercial pressure is more likely to support exploitation and adjacent exploration than radical exploration unless a mandate change or new technological domain alters the opportunity set.	Use adjacent experiments to preserve future options, and reassess mandate, autonomy, and investment horizon when a genuinely new domain emerges.



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Conclusion

This study shows that ambidexterity can be organized at the corporate-portfolio level through differentiated roles across legally distinct but commonly controlled entities. Across 11 entities in Pertamina, Telkom, and PLN, three configurations emerge: subsidiary-to-parent convergence, parent-to-subsidiary convergence, and persistent complementary separation. Corporate coherence therefore does not require convergence toward one exploration–exploitation position; it can rest on complementary specialization. Institutional–market and technological conditions shape the pressure for renewal but do not determine entity roles, which depend on mandate, autonomy, resources, and governance. For parents, the implication is to make role allocation explicit and align mandates and resources accordingly, rather than push every entity toward the same position. The study relies on annual reports, relative technology-speed evidence, and an association-based design. Future research should test the proposed mechanism using interviews, resource-flow data, direct technology measures, and broader samples.