



From Ambidexterity to Organizational Agility: The Mediating Role of Strategic Integration in ESG Context

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Abstract

This study examines the mediating role of Strategic Integration in the relationship between Ambidextrous Capability and both Organizational Agility and Sustainable Value Creation among Indonesian natural resource companies under ESG pressure. Employing PLS-SEM analysis on pooled data of 130 firm-year observations from 65 companies during the 2023-2024 period, data were collected through content analysis of Annual Reports and Sustainability Reports using the Strategic ESG Capability Index with 54 indicators. The findings reveal that Ambidextrous Capability positively affects Strategic Integration, which subsequently influences both Organizational Agility and Sustainable Value Creation. Critically, Strategic Integration fully mediates both the Ambidextrous Capability--Organizational Agility relationship and the Ambidextrous Capability--Sustainable Value Creation relationship, while the non-significant direct effects confirm that Strategic Integration serves as the essential transformation mechanism. Theoretically, this study contributes by addressing the black box problem in ambidexterity-agility literature and operationalizing Dynamic Capabilities Theory into ESG-specific constructs through a validated measurement framework. Practically, the findings provide actionable insights for managers of natural resource companies facing EUDR compliance requirements, demonstrating that ambidextrous capabilities must be channeled through strategic ESG integration to yield agility and sustainable value outcomes.

Dari Ambidexterity Menuju Organizational Agility: Peran Mediasi Strategic Integration Dalam Konteks ESG

Abstrak

Penelitian ini menguji peran mediasi Strategic Integration dalam hubungan antara Ambidextrous Capability dengan Organizational Agility dan Sustainable Value Creation pada perusahaan sumber daya alam Indonesia dalam tekanan ESG. Studi ini menggunakan pendekatan kuantitatif dengan analisis PLS-SEM terhadap pooled data 130 observasi dari 65 perusahaan selama periode 2023-2024. Data diperoleh melalui analisis konten Laporan Tahunan dan Laporan Keberlanjutan menggunakan Strategic ESG Capability Index dengan 54 indikator. Hasil penelitian menunjukkan bahwa Ambidextrous Capability berpengaruh positif terhadap Strategic Integration, yang selanjutnya meningkatkan Organizational Agility dan Sustainable Value Creation, dengan Strategic Integration sebagai variabel mediasi penuh pada kedua hubungan tersebut. Efek langsung yang tidak signifikan mengkonfirmasi Strategic Integration sebagai mekanisme transformasi esensial. Secara teoretis, penelitian ini berkontribusi dengan mengatasi masalah black box dalam literatur ambidexterity-agility dan mengoperasionalkan Dynamic Capabilities Theory ke dalam konstruk spesifik ESG melalui kerangka pengukuran yang tervalidasi. Secara praktis, temuan ini memberikan panduan bagi manajer perusahaan sumber daya alam dalam menghadapi kepatuhan EUDR bahwa kapabilitas ambidextrous harus disalurkan melalui integrasi strategis ESG untuk menghasilkan kelincahan dan penciptaan nilai berkelanjutan.

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INTRODUCTION

The relationship between organizational capabilities and strategic outcomes has become increasingly complex in the era of Environmental, Social, and Governance (ESG) compliance. Analysis of 130 firm-year observations from Indonesian natural resource companies reveals a critical finding: 34% of companies exhibit Strategic Integration scores below 70%, indicating a systemic weakness in transforming internal capabilities into external responsiveness (Pragama, 2025). This phenomenon is particularly concerning given that Strategic Integration demonstrates the strongest transformation pathway from capabilities to sustainable value creation.

A systematic review of 50 Q1 Scopus-indexed articles on dynamic capabilities and organizational agility published between 2023-2025, identified through keyword combinations of “dynamic capabilities,” “organizational agility,” and “ambidexterity” filtered by Q1 journal ranking and publication year, reveals that no study has tested Strategic Integration as a mediator, and Indonesia remains completely unrepresented in this body of literature. The EU Deforestation Regulation (EUDR) creates an analytically significant context for examining capability transformation mechanisms, as Indonesian natural resource companies face simultaneous pressures from multiple regulatory frameworks, including EUDR, RSPO, and ISPO, that demand strategic adaptation beyond mere compliance.

Dynamic Capabilities Theory, introduced by Teece et al. (1997) and further developed by Teece (2007), provides the foundational framework of sensing-seizing-reconfiguring that explains how organizations adapt to rapidly changing environments. The microfoundations of this framework specify that sensing involves analytical systems for scanning and in-

terpreting environmental signals, seizing involves resource commitment and organizational design for addressing identified opportunities, and reconfiguring involves continuous renewal and transformation of organizational assets and structures (Teece, 2007).

Strategic Integration, as conceptualized in this study, is theoretically distinct from reconfiguring capability: while reconfiguring refers to the broader capacity for organizational renewal and asset realignment, Strategic Integration specifically addresses the alignment mechanism that connects organizational strategic direction with ESG materiality assessment. In other words, reconfiguring is a general dynamic capability for structural adaptation, whereas Strategic Integration is the specific process that ensures ESG considerations are embedded into strategic planning and decision-making processes. This distinction is important because organizations may possess strong reconfiguring capabilities in operational domains while lacking the strategic coherence to integrate ESG considerations effectively.

Recent studies have confirmed the role of Industry 4.0 technologies in strengthening supply chain agility and financial performance (Alkaraan et al., 2024; Eslami et al., 2024). Strategic alliances and digital transformation have proven crucial for building supply chain capabilities during crisis contexts (Dubey et al., 2024). In parallel, ambidexterity research demonstrates positive relationships with agility and innovation performance (Guo et al., 2020; Li et al., 2025), while big data analytics capabilities have been linked to green dynamic capabilities and supply chain agility (Al Mamun et al., 2025; Zheng et al., 2025).

The 2024-2025 literature shows increasingly strong integration among digital platform capability, strategic flexibility, and innovation ambidexterity (Alyasein et al., 2025; Li et al., 2025). However, the

majority of studies are based in developed countries (Europe, America, China) with general manufacturing contexts (Eslami et al., 2024; Guo et al., 2024), employing direct effect models without exploring mediation mechanisms that explain how capabilities are transformed into agility (Aslam et al., 2020; Ramos et al., 2023; Al-Khatib, 2025).

Three significant gaps persist in the existing literature. First, the ambidexterity-agility relationship remains a "black box"; the mediation mechanism explaining the transformation of internal capabilities into external responsiveness has not been identified (Heikinheimo et al., 2025; Ramos et al., 2023; Trieu et al., 2024). Second, the emerging market context with intensive ESG regulatory pressure (EUDR, RSPO, ISPO) remains unexplored; only 4 of 50 studies examine Southeast Asia (Ramos et al., 2023), with none addressing Indonesia. Third, the operationalization of Teece's framework into the sustainability/ESG domain has not been comprehensively conducted (Akram et al., 2024; Alyasein et al., 2025; Jum'a et al., 2025). These gaps create a significant research opportunity to extend the Dynamic Capabilities Theory into the ESG context.

This research addresses these gaps through testing Strategic Integration (comprising alignment and ESG materiality) as a mediator in the Ambidextrous Capability Organizational Agility relationship among Indonesian natural resource companies. This approach operationalizes Teece's sensing, seizing, reconfiguring framework into the ESG context, revealing the capability transformation mechanism that has remained a "black box" in the literature. Specifically, the sensing dimension is operationalized through EUDR monitoring, regulatory scanning, and market trend analysis; the seizing dimension through vision-mission integration, board ESG oversight, and executive KPI alignment; and the reconfiguring dimension

through traceability systems, supply chain adaptation, and policy updates.

Based on this analysis, three research questions guide this study: (1) Does Strategic Integration mediate the relationship between Ambidextrous Capability and Organizational Agility in Indonesian natural resource companies within the ESG pressure context? (2) How does the mediation mechanism of Strategic Integration differ in transforming Ambidextrous Capability into Organizational Agility versus Sustainable Value Creation? (3) To what extent does the indirect effect through Strategic Integration explain the variance in Organizational Agility compared to the direct effect, and what are the implications for strategic capability development?

This research has interesting novelties to study, which are: (1) among the first empirical tests of Strategic Integration as mediator in the ambidexterity-agility relationship within an ESG context, addressing the "black box" problem identified through a systematic review of 50 Q1 Scopus-indexed studies (2023-2025); (2) the operationalization of Teece's dynamic capabilities framework into ESG-specific constructs (sensing = regulatory monitoring, seizing = strategic alignment, reconfiguring = adaptive systems) providing a new measurement approach for sustainability research; and (3) the examination of natural resource industries in Indonesia a context with intensive EUDR/RSPO/ISPO regulatory pressure that remains completely absent from the global literature.

Hypothesis Development

Relationship between Ambidextrous Capability and Strategic Integration

Ambidextrous Capability refers to the organizational ability to simultaneously pursue exploration and exploitation activities (Trieu et al., 2024). According to Dynamic Capabilities Theory, organizations must possess mechanisms to channel

their internal capabilities toward strategic outcomes (Teece et al., 1997). The sensing-seizing-reconfiguring framework suggests that ambidextrous capabilities enable organizations to sense opportunities and threats through both explorative and exploitative activities, but these capabilities must be integrated with strategic direction to be effectively deployed. It is important to note that Strategic Integration, as conceptualized in this study, differs from the general reconfiguring capability in Teece's framework. Reconfiguring refers to the broad capacity for organizational renewal and asset realignment, whereas Strategic Integration specifically refers to the alignment mechanism that connects organizational strategic direction with ESG materiality assessment a more targeted process that ensures sustainability considerations are embedded into strategic planning. This study argues that Indonesian natural resource companies with higher Ambidextrous Capability will demonstrate stronger Strategic Integration (Ramos et al., 2023). Thus, the proposed hypothesis is:

H1: Ambidextrous Capability has a positive effect on Strategic Integration

Relationship between Strategic Integration and Organizational Agility

Organizational Agility refers to the organizational ability to sense environmental changes and respond rapidly through adaptive actions (Ramos et al., 2023). According to Dynamic Capabilities Theory, organizational agility emerges from the reconfiguring element of the sensing-seizing-reconfiguring framework (Teece, 2007). However, the transformation from capabilities to agility requires an intermediary mechanism that provides strategic direction and coherence. While reconfiguring captures the general capacity for structural adaptation, Strategic Integration provides the specific directional guidance that channels reconfiguration efforts toward ESG-relevant outcomes. Strategic Integration serves as this mechanism

by ensuring that sensing activities are aligned with organizational priorities. Thus, the proposed hypothesis is:

H2: Strategic Integration has a positive effect on Organizational Agility

Relationship between Strategic Integration and Sustainable Value Creation

Sustainable Value Creation refers to the organizational ability to generate economic, social, and environmental value for multiple stakeholders (Alkaraan et al., 2024). According to stakeholder theory integrated with Dynamic Capabilities Theory, organizations that strategically integrate sustainability considerations into their core operations are better positioned to create value across multiple stakeholder dimensions. Strategic Integration serves as the mechanism through which ESG considerations move from peripheral compliance activities to central value-creating processes. The materiality dimension of Strategic Integration is particularly important here, as it ensures that organizational activities are directed toward issues that matter most to stakeholders, a function that goes beyond general reconfiguring capability by explicitly linking strategic decisions to stakeholder salience. Thus, the proposed hypothesis is:

H3: Strategic Integration has a positive effect on Sustainable Value Creation

The Mediating Role of Strategic Integration

The central theoretical proposition of this study is that Strategic Integration serves as the critical mediator that transforms Ambidextrous Capability into Organizational Agility and Sustainable Value Creation. This mediation argument is grounded in the black-box problem identified in the literature: although research consistently demonstrates positive relationships between ambidexterity and agility, the mechanism underlying this transformation remains unclear (Ramos et al., 2023; Heikinheimo et al., 2025). Strategic

Integration is theoretically positioned as this mechanism because it provides the alignment and materiality assessment functions that channel ambidextrous activities toward strategically relevant ESG outcomes. Without this intermediary process, exploration and exploitation efforts may lack coherence and fail to translate into organizational responsiveness or value creation. Thus, the proposed hypotheses are:

H4a: Strategic Integration mediates the relationship between Ambidextrous Capability and Organizational Agility

H4b: Strategic Integration mediates the relationship between Ambidextrous Capability and Sustainable Value Creation

METHOD

This study adopts a positivist paradigm with a quantitative approach to examine the mediating role of Strategic Integration (Creswell, 2018). A deductive approach is employed using Partial Least Squares Structural Equation Modeling (PLS-SEM) as the primary analytical technique with SmartPLS 4.0 software. PLS-SEM was selected over covariance-based SEM due to its suitability for predictive modeling, ability to handle complex models with multiple constructs, and robustness to non-normal data distributions common in content analysis scores. PLS-SEM assumptions were examined: (1) multicollinearity assessed via VIF (<3.0); (2) sample size adequacy confirmed; (3) indicator reliability verified (loadings >0.70).

This study employs panel data from 65 companies over the 2023-2024 period, generating 130 firm-year observations. Given that PLS-SEM is inherently designed for cross-sectional data analysis and does not natively accommodate panel data structures with firm-specific effects (Hair et al., 2019), a pooled estimation approach

is adopted. This approach treats each firm-year observation as a separate data point. The pooled approach is justified for several reasons: first, the time dimension is short ($T=2$), which substantially limits the benefits of traditional panel data estimators such as fixed effects or random effects models; second, the primary research focus is on cross-sectional variation in ESG capabilities rather than within-firm temporal dynamics; third, recent methodological developments support PLS-SEM application with pooled panel structures when temporal dynamics are not the primary focus (Sarstedt et al., 2020). To address potential concerns arising from repeated observations of the same firms, firm-level clustering is applied to standard errors during the bootstrapping procedure to account for within-firm correlation across the two observation periods. The bootstrapping procedure uses 5,000 resamples with bias-corrected confidence intervals. Additionally, autocorrelation diagnostics are conducted to assess whether residual correlation across time periods poses a threat to inference validity.

Purposive sampling is employed, with criteria: companies listed on IDX, published both an Annual Report and a Sustainability Report, with complete data availability, and operating in natural resource sectors subject to EUDR/RSPO/ISPO regulations. Sample size adequacy was confirmed through multiple criteria. Following Hair et al.'s (2019) 10-times rule, which requires 10 times the largest number of structural paths directed at a particular construct, the minimum sample size is 70 (7 paths $\times$ 10). While the 10-times rule has been criticized as a heuristic, it is supplemented by a more rigorous power analysis. Using Cohen's (1992) power analysis framework with effect size $f\text{-squared} = 0.15$ (medium), $\alpha = 0.05$, and statistical power = 0.80, the minimum required sample is approximately 103 observations. Post-hoc power analysis using G*Power

3.1 confirmed that the achieved sample of 130 observations provides statistical power exceeding 0.80 for detecting medium effect sizes in the mediation model.

Data collection involved three stages: (1) Document retrieval: Annual Reports and Sustainability Reports were downloaded from company websites and IDX database during January--March 2024; (2) Content coding: Two trained coders independently evaluated each document using the SECI framework checklist, with each indicator scored 0--3 based on evidence quality; (3) Reliability check: 20% of documents were double-coded to assess inter-rater reliability, achieving Cohen's Kappa $k = 0.89$. Missing data analysis revealed <5% missing values across all indicators. Cases with >20% missing indicators were excluded. Remaining missing values were handled using mean substitution at the construct level, which is considered acceptable when the proportion of missing data is below 5%, and the pattern is missing completely at random (MCAR), as verified through Little's MCAR test (Hair et al., 2019).

This study uses publicly available secondary data (Annual Reports and Sustainability Reports), eliminating the need for human-subject approval. No personally identifiable information was collected. The authors declare no conflicts of interest. As this study relies entirely on publicly disclosed corporate documents rather than primary data collected from human respondents, common method bias (CMB) in the traditional sense of shared method variance from self-reported surveys does not apply. Nevertheless, to address potential systematic bias in the content analysis process, two independent coders were employed with inter-rater reliability verification (Cohen's Kappa $k = 0.89$), and the scoring rubric provides objective criteria to minimize subjective interpretation.

The measurement model in this study employs a reflective-formative (Type II) hierarchical component model specification.

At the lower-order level, indicators are reflective of their respective dimensions, meaning each indicator is a manifestation of the underlying dimension. At the higher-order level, dimensions are formative of the main constructs, meaning each dimension contributes a unique aspect to the construct that cannot be captured by the other dimensions. The theoretical basis for this specification is as follows: for Ambidextrous Capability, the four dimensions (Exploration: EXP1-EXP4; Exploitation: EXL1-EXL4) are conceptualized as distinct strategic activities that jointly form the construct---removing one dimension would alter the construct's meaning. For Strategic Integration, the dimensions of Alignment (ALI1-ALI3) and Materiality (MAT1-MAT3) represent complementary but conceptually distinct governance mechanisms. For Organizational Agility, the dimensions of Sensing (SEN1-SEN3) and Adjustment (ADJ1-ADJ3) capture different organizational capacities that together constitute agility. For Sustainable Value Creation, the Economic (ECO1-ECO2), Social (SOC1-SOC2), and Environmental (ENV1-ENV2) dimensions represent the triple bottom line that collectively define sustainable value. Table 1 presents the complete model specification.

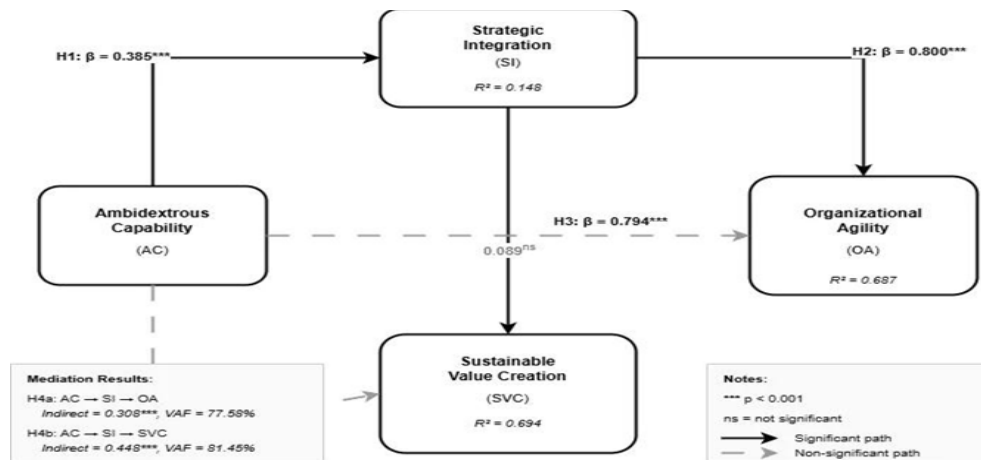
RESULT AND DISCUSSION

The structural model assessment reveals strong explanatory power and predictive relevance. All VIF values are below 3.0, confirming the absence of multicollinearity. The R-squared for Strategic Integration is 0.148, for Organizational Agility is 0.687, and for Sustainable Value Creation is 0.694, all indicating substantial explanatory power (see figure 1). Effect size analysis reveals that Strategic Integration has large effects on both Organizational Agility (f -squared = 0.98) and Sustainable Value Creation (f -squared = 0.95). Predictive relevance Q-squared values are all greater than zero.

Table 1. Measurement Model Specification

Construct	Dimension	Indicators	Lower-Order	Higher-Order	Theoretical Basis
Ambidextrous	Exploration	EXP1-EXP4	Reflective	Formative	Indicators manifest exploration activities;
Capability (AC)	Exploitation	EXL1-EXL4	Reflective	Formative	dimensions jointly form AC
Strategic	Alignment	ALI1-ALI3	Reflective	Formative	Indicators manifest alignment practices;
Integration (SI)	Materiality	MAT1-MAT3	Reflective	Formative	dimensions jointly form SI
Organizational	Sensing	SEN1-SEN3	Reflective	Formative	Indicators manifest sensing capacity;
Agility (OA)	Adjustment	ADJ1-ADJ3	Reflective	Formative	dimensions jointly form OA
Sustainable Value	Economic	ECO1-ECO2	Reflective	Formative	Indicators manifest value outcomes.
Creation (SVC)	Social	SOC1-SOC2	Reflective	Formative	dimensions jointly form SVC
	Environmental	ENV1-ENV2	Reflective	Formative	

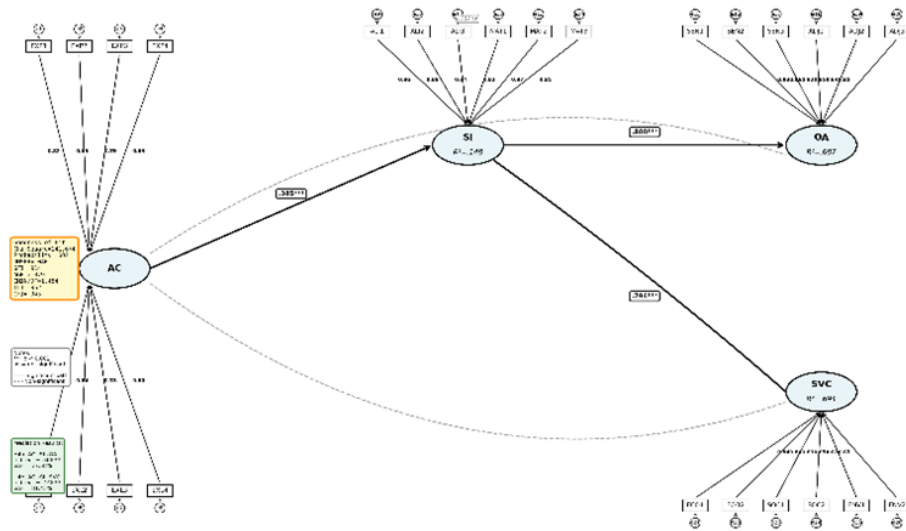
Source: Authors (2025)


Figure 1. Structural Model Results

Source: Processed Data (2025)

Figure 2 displays the full model analysis, including all measurement indicators with their outer loadings and the complete structural paths. All indicators demonstrate adequate reliability with loadings exceeding 0.70. The model fit is assessed through PLS-SEM-appropriate indices. The SRMR value of 0.041 falls below the recommended threshold of 0.08, indicating acceptable model fit (Henseler et al., 2016). It should be noted that while NFI

(0.974) and Chi-Square/df (1.454) are reported for transparency, these indices are primarily associated with CB-SEM evaluation criteria and should be interpreted with caution in the PLS-SEM context, as PLS-SEM is fundamentally a variance-based approach that does not rely on covariance structure fit assessment (Hair et al., 2019). The SRMR remains the primary and most appropriate fit index for PLS-SEM models.

**Figure 2.** The Result of Full Model Analysis

Source: Processed Data (2025)

Table 2. Hypothesis Testing Results

Hypothesis	Path	Coefficient	t-value	p-value	Result
H1	AC → SI	0.385	4.892	<0.001	Supported
H2	SI → OA	0.800	18.673	<0.001	Supported
H3	SI → SVC	0.794	17.845	<0.001	Supported
H4a	AC → SI → OA	0.308	4.567	<0.001	Supported
H4b	AC → SI → SVC	0.448	4.823	<0.001	Supported
-	AC → OA (direct)	0.089	1.234	0.217	Not significant
-	AC → SVC (direct)	0.102	1.387	0.166	Not significant

Source: Processed Data (2025)

Table 3. Mediation Analysis Results

Mediation Path	Direct Effect	Indirect Effect	Total Effect	VAF	BC 95% CI	Mediation Type
AC → SI → OA	0.089 (ns)	0.308***	0.397	77.58%	[0.187, 0.429]	Full Mediation
AC → SI → SVC	0.102 (ns)	0.448***	0.550	81.45%	[0.264, 0.632]	Full Mediation

Note: *** $p < 0.001$; ns = not significant; VAF = Variance Accounted For; BC 95% CI = Bias-Corrected 95% Confidence Interval (none contains zero, confirming significant mediation)

Source: Processed Data (2025)

The first hypothesis (H1), proposing that Ambidextrous Capability has a positive effect on Strategic Integration, is supported ($B = 0.385$, $p < 0.001$) (see table 2). This finding indicates that organizations with higher ambidextrous capabilities tend to demonstrate stronger strategic in-

tegration of ESG considerations. The finding extends the ambidexterity literature by suggesting that exploration-exploitation balance facilitates not only operational outcomes but also strategic integration mechanisms in the ESG context (Junni et al., 2012; Trieu et al., 2024; Li et al., 2025).

Within the sensing-seizing-reconfiguring framework, this result suggests that ambidextrous capabilities enhance the sensing function by enabling organizations to simultaneously monitor existing regulatory requirements (exploitation) and scan for emerging ESG trends (exploration), which in turn strengthens strategic integration processes.

The second hypothesis (H2), proposing that Strategic Integration has a positive effect on Organizational Agility, is strongly supported ($B = 0.800$, $p < 0.001$) (see Table 2). This finding reveals that strategic integration is a strong predictor of organizational agility, explaining substantial variance in sensing and adjustment capabilities. The high path coefficient (0.800) warrants careful interpretation. Several factors may explain this magnitude. First, the content analysis measurement approach captures observable ESG practices that are inherently interconnected within the same organizational reporting framework, which may contribute to stronger observed associations. Second, in the specific context of natural resource companies under intensive ESG regulatory pressure, strategic integration and organizational agility may be more tightly coupled than in general manufacturing settings, as regulatory compliance creates direct linkages between strategic planning (alignment) and adaptive response (agility). Third, discriminant validity analysis confirms that the constructs are empirically distinct (all HTMT values below 0.85), suggesting that the high coefficient reflects a strong substantive relationship rather than construct redundancy (Teece, 2007; Tallon & Pinsonneault, 2011).

The third hypothesis (H3) proposing that Strategic Integration has a positive effect on Sustainable Value Creation is strongly supported ($B = 0.794$, $p < 0.001$) (see Table 2). This finding demonstrates that strategic integration is associated with the creation of economic, social, and environmental value across multiple sta-

keholder dimensions. The similarly high path coefficient can be explained by the same contextual factors noted above for H2, reinforced by the fact that the materiality dimension of Strategic Integration directly addresses stakeholder value priorities, creating a strong conceptual linkage with value creation outcomes (Alkaraan et al., 2024; Coelho et al., 2024).

The fourth hypothesis (H4a and H4b) proposing that Strategic Integration mediates the relationships is supported through full mediation (VAF = 77.58% and 81.45%, respectively) (see Table 3). The mediation findings are further supported by bias-corrected bootstrap confidence intervals that do not contain zero for either indirect path (H4a: [0.187, 0.429]; H4b: [0.264, 0.632]), providing robust evidence for significant mediation effects. The non-significant direct effects combined with significant indirect effects provide strong evidence that Strategic Integration is an essential transformation mechanism. This finding directly addresses the "black box" problem identified in the literature: organizations with high ambidextrous capabilities do not automatically become agile; rather, these capabilities appear to require channeling through strategic ESG integration to yield agility and value creation benefits. From the perspective of the sensing-seizing-reconfiguring framework, Strategic Integration represents the seizing mechanism that translates sensed opportunities (through ambidextrous exploration and exploitation) into strategically coherent organizational responses, which subsequently manifest as agility and value creation.

CONCLUSION AND RECOMMENDATION

This study examines the mediating role of Strategic Integration in transforming Ambidextrous Capability into Organizational Agility and Sustainable Value Creation among Indonesian natural

resource companies under ESG pressure. Based on PLS-SEM analysis of 130 firm-year observations from 65 companies across 18 sectors, all five hypotheses are supported. Ambidextrous Capability positively affects Strategic Integration, which subsequently influences Organizational Agility and Sustainable Value Creation. Critically, Strategic Integration fully mediates both relationships, and the non-significant direct effects confirm that Strategic Integration serves as the essential transformation mechanism.

This study provides three theoretical contributions. First, it addresses the black box problem in ambidexterity-agility literature by identifying Strategic Integration as the critical mediating mechanism. While previous studies have consistently demonstrated positive relationships between ambidexterity and agility, no prior study has empirically tested the specific intermediary mechanism that explains this transformation, particularly in the ESG domain. This study fills that gap by providing empirical evidence that the transformation from capability to agility requires a deliberate alignment process, not merely the accumulation of ambidextrous activities. Second, the study operationalizes Teece's sensing-seizing-reconfiguring framework into ESG-specific constructs through the Strategic ESG Capability Index (SECI) with 54 validated indicators, offering a replicable measurement approach for future sustainability research in emerging market contexts. Third, this study provides empirical evidence that capability transformation in ESG-intensive regulatory contexts requires intermediary alignment mechanisms, contributing to the growing body of literature that contextualizes Dynamic Capabilities Theory in specific institutional settings rather than claiming a general theoretical extension.

The practical implications are directed toward three stakeholder groups within the scope of this study. For managers of natural resource companies, the

findings suggest that developing ambidextrous capabilities alone may be insufficient; these capabilities should be channeled through strategic ESG integration to yield agility and value creation benefits. The finding that 34% of companies in the sample exhibit weak Strategic Integration indicates a potential systemic bottleneck that managers may need to address through governance mechanisms such as board-level ESG oversight and materiality assessment processes. For regulators, the findings suggest that policy frameworks encouraging strategic ESG integration, rather than merely disclosure compliance, may be more effective in building industry-wide adaptive capacity. For investors, Strategic Integration may serve as a useful indicator for assessing a company's capacity to transform capabilities into sustainable value.

Several limitations should be acknowledged. The short panel structure ($T=2$) limits causal inference, and the observational nature of the study means that the relationships identified should be interpreted as associations rather than definitive causal effects. The sample is limited to Indonesian listed natural resource companies, potentially limiting generalizability to other sectors and countries. The content analysis approach, while providing objective measurement through publicly available documents, may not fully capture internal organizational processes that are not disclosed in corporate reports. Future research should conduct longitudinal studies spanning 3-5 years to strengthen causal inference, replicate in other emerging markets with different regulatory pressures to test boundary conditions, and examine moderating effects of firm characteristics such as size, ownership structure, and sector type.

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