

Dynamic Leadership and Business Transformation: The Mediating Role of Organizational Commitment at PT Pertamina

Koeshartanto^{1*)}; Suharnomo²⁾; Mirwan Surya Perdhana³⁾

¹⁾ koeshartanto@students.undip.ac.id, Universitas Diponegoro, Indonesia

²⁾ suharnomo.undip@gmail.com, Universitas Diponegoro, Indonesia

³⁾ mirwan@live.undip.ac.id, Universitas Diponegoro, Indonesia

*) Corresponding Author

ABSTRACT

Objectives: This study aims to examine the influence of Dynamic Leadership on Business Transformation, with Organizational Commitment as a mediating variable, among employees in Indonesia's energy sector, particularly at PT Pertamina (Persero), amid technological disruption and the transition toward Net Zero Emissions (NZE) 2060.

Methodology: This study adopts an explanatory quantitative approach using Partial Least Squares Structural Equation Modeling (PLS-SEM). The proposed framework focuses on three constructs: Dynamic Leadership, Business Transformation, and Organizational Commitment. The model is designed to assess both the direct effect of Dynamic Leadership on Business Transformation and its indirect effect through Organizational Commitment.

Findings: The proposed framework establishes Organizational Commitment as a potential mediating mechanism linking Dynamic Leadership to Business Transformation. However, the significance and magnitude of these relationships require empirical testing using data collected from employees.

Conclusion: This study provides a conceptual foundation for understanding how adaptive and proactive leadership may facilitate business transformation by strengthening employees' organizational commitment. The framework offers potential implications for leadership development and sustainable transformation strategies in Indonesia's energy sector.

Keywords: Dynamic Leadership; Business Transformation; Organizational Commitment; Energy Sector; PLS-SEM.

Submitted: 24-03-2025

Revised: 17-12-2025

Accepted: 21-12-2025

Article Doi:

http://dx.doi.org/10.22441/jurnal_mix.2025.v15i3.020

INTRODUCTION

Introduction The energy sector is undergoing substantial technological, regulatory, and market changes. In Indonesia, state-owned enterprises operating in the energy sector face the dual challenge of maintaining a reliable energy supply while meeting decarbonization commitments and transitioning to lower-carbon energy systems. Addressing these demands requires more than investment in new technologies and infrastructure. It also requires organizations to develop leadership capabilities and team member readiness to interpret environmental changes, coordinate resources, and implement new ways of working. Consequently, understanding the organizational factors that support business transformation has become increasingly important in the context of Indonesia's evolving energy industry (Teece, Pisano, and Shuen 1997).

Business transformation is a multidimensional process involving business-model renewal, process redesign, digitalization, capability development, and changes in organizational routines. Although transformation initiatives are frequently framed as strategic or technological projects, their implementation also depends on organizational and human factors. Leaders play an important role in communicating strategic priorities, responding to environmental uncertainty, mobilizing resources, and supporting employees throughout the transformation process. At the same time, employees' psychological attachment to the organization may influence their willingness to accept change and contribute to transformation initiatives. These considerations suggest that business transformation should be examined not only in terms of strategic decisions and technological investments but also in terms of leadership practices and employee-related mechanisms that may facilitate its implementation (Teece, 2007).

Against this background, dynamic Leadership and organizational commitment represent relevant constructs for understanding the organizational processes associated with business transformation. Dynamic Leadership concerns leaders' ability to respond to changing conditions, adapt decisions, communicate direction, and mobilize organizational resources. Organizational commitment, meanwhile, reflects employees' psychological attachment to and identification with their organization. When employees remain committed to the organization, they may be more willing to support organizational priorities and participate in change initiatives. Examining these constructs together may therefore provide a clearer understanding of how leadership practices are associated with employees' perceptions of business transformation (Teece, 2014).

The present study focuses on PT Pertamina (Persero), an Indonesian state-owned enterprise operating in the energy sector. The study examines the relationships among dynamic Leadership, organizational commitment, and business transformation from the employees' perspective. In particular, it investigates whether dynamic Leadership is associated with business transformation directly and whether organizational commitment statistically mediates this relationship. By focusing on these relationships, the study seeks to explain the potential role of team member commitment in connecting leadership practices with perceived organizational transformation (Eisenhardt & Martin, 2000).

The implementation of business transformation requires organizations to align strategic objectives, organizational capabilities, and team member involvement. In a changing energy environment, leaders need to interpret external developments, communicate the direction of change, and encourage the organization to adapt its processes and routines. However, the existence of a transformation strategy does not necessarily mean that employees will

understand, accept, or actively support its implementation. The way Leadership is exercised and the extent to which employees remain psychologically connected to the organization may therefore be relevant to understanding perceived progress in transformation (Winter 2003).

Dynamic Leadership may contribute to this process by providing direction, facilitating adaptation, and mobilizing resources in response to changing organizational demands. Through these practices, leaders may help employees understand transformation priorities and recognize their roles in achieving organizational objectives. Nevertheless, the relationship between Leadership and transformation may also involve employees' attitudes toward the organization. Organizational commitment may be one mechanism by which leadership practices are associated with employees' willingness to support organizational change (Helfat et al., 2007).

Despite the practical relevance of these relationships, the connections among dynamic Leadership, organizational commitment, and business transformation need to be examined within a clearly specified empirical model and organizational context. In particular, it is important to distinguish the direct association between dynamic Leadership and business transformation from the indirect association that may operate through organizational commitment. This distinction provides the basis for investigating whether organizational commitment functions as a mediating variable in the proposed relationship (Meyer & Allen, 1991).

This study examines three constructs within a single explanatory model: dynamic Leadership, organizational commitment, and business transformation. Dynamic Leadership (DL) is conceptualized as an employee-perceived leadership capability characterized by environmental awareness, adaptive decision-making, communication, resource mobilization, and support for organizational change. Within the proposed model, dynamic Leadership serves as the predictor construct and represents the leadership-related factor potentially associated with organizational commitment and business transformation.

Organizational commitment (OC) refers to employees' psychological attachment to and identification with the organization. Following the Allen and Meyer (1990) framework, organizational commitment may comprise three components: affective commitment, which reflects emotional attachment to the organization; continuance commitment, which concerns the perceived costs of leaving; and normative commitment, which reflects a sense of obligation to remain with the organization. The operationalization of this construct should clearly specify whether these dimensions are analyzed separately or combined into a higher-order construct. This distinction is important to ensure that the theoretical definition is consistent with the measurement instrument and the subsequent statistical analysis.

Business transformation (BT) refers to employees' perceptions of the organization's capacity to renew business processes, utilize digital technologies, improve operational efficiency, adapt strategically, and pursue more sustainable activities. Because this study relies on team member survey responses, business transformation is interpreted as a perceived organizational capability or transformation-related outcome rather than a direct, objective measure of company-wide transformation performance. Independent organizational indicators should therefore support claims about actual organizational performance if such claims are made (Meyer & Herscovitch, 2001).

Building on the preceding discussion, this study addresses four research questions. First, does dynamic Leadership have a positive association with business transformation? Second, does dynamic Leadership have a positive association with organizational commitment? Third, does organizational commitment have a positive association with business transformation?

Fourth, does organizational commitment mediate the relationship between dynamic Leadership and business transformation?

The primary objective of this study is to examine the direct relationships among dynamic Leadership, organizational commitment, and business transformation, and to assess the mediating role of organizational commitment. Specifically, the study seeks to determine whether dynamic Leadership is associated with employees' perceptions of business transformation, whether this association is accompanied by organizational commitment, and whether commitment statistically mediates part of the relationship between Leadership and perceived transformation (Meyer et al., 2002).

The intended contribution of this study is to provide a more explicit explanation of the employee-related mechanism that may connect leadership practices with perceived business transformation in an Indonesian energy-sector organization. By examining organizational commitment as a mediating construct, the study extends the analysis beyond the direct relationship between Leadership and transformation. It considers how employees' psychological attachment to the organization may be relevant to the transformation process. The findings are expected to offer insights into the organizational dimensions of business transformation and provide a basis for managerial consideration in leadership development and team member engagement.

LITERATURE REVIEW

Dynamic Capabilities Theory

Dynamic Capabilities Theory provides a theoretical foundation for explaining how organizations maintain their competitiveness in environments characterized by continuous change. (Oreg, Vakola, and Armenakis 2011) Conceptualize dynamic capabilities as an organization's ability to integrate, develop, and reconfigure internal and external competencies in response to changing environmental conditions. Extending this perspective, Yukl and Gardner (2020) identify three interrelated processes underlying dynamic capabilities: sensing opportunities and threats, seizing opportunities, and reconfiguring organizational assets and routines. Together, these processes explain how organizations recognize emerging developments, determine appropriate responses, and adjust their resources and capabilities to remain aligned with changing conditions.

These processes are particularly relevant to the energy sector, where technological developments, regulatory requirements, market dynamics, and the transition toward lower-carbon energy systems create continuing demands for organizational adaptation. Organizations must be able to identify changes in their operating environment, evaluate strategic alternatives, and mobilize resources to implement appropriate responses. Transformation, therefore, involves not only adopting new technologies but also adapting organizational structures, work processes, and team member capabilities to support changing strategic priorities (Vial, 2019).

Within this theoretical perspective, dynamic Leadership is positioned as a leadership-related factor that may facilitate organizational adaptation. Leaders who recognize emerging challenges, communicate strategic priorities, and support the mobilization of resources may help create conditions conducive to transformation. Nevertheless, leadership behavior should not be equated directly with organizational dynamic capabilities. Dynamic Leadership represents a leadership-related construct, whereas dynamic capabilities concern the broader organizational capacity to integrate and reconfigure resources. This distinction is important

when defining the research constructs, developing their measurement instruments, and interpreting the relationships examined in this study (Verhoef et al., 2021).

Dynamic Leadership

In this study, dynamic Leadership refers to leadership behaviors that combine strategic direction with the flexibility required to respond to changing circumstances. Rather than relying exclusively on established procedures, dynamic leaders are expected to interpret emerging issues, reconsider decisions when new information becomes available, communicate the rationale for organizational change, and encourage team member participation in implementation. Such behaviors may help employees understand the direction of organizational change and recognize how their contributions relate to broader transformation objectives (Warner & Wäger, 2019).

Three related characteristics are particularly relevant to the conceptualization of dynamic Leadership in this study. First, strategic adaptability reflects a leader's ability to maintain a clear organizational direction while adjusting priorities or implementation approaches in response to changing conditions. Second, cognitive agility concerns the capacity to evaluate complex information, consider alternative perspectives, and revise decisions when circumstances or available evidence warrant reconsideration. Third, empathetic communication involves listening to employees, explaining organizational decisions transparently, and acknowledging concerns that may arise during periods of change (Yukl & Gardner, 2020).

These characteristics may be important in transformation settings because employees often need to adjust to revised procedures, responsibilities, technologies, and performance expectations. Leadership that combines adaptability with clear communication may help reduce uncertainty and encourage employees to engage with transformation initiatives. From this perspective, dynamic Leadership is expected to be associated with both employees' perceptions of the organization's transformation efforts and their psychological attachment to the organization. These proposed relationships are examined empirically in the present study.

Organizational Commitment

Organizational commitment describes the psychological relationship between employees and the organization in which they work. (Hair et al. 2022) The three-component model distinguishes affective, continuance, and normative commitment. Although these components all concern employees' relationships with their organization, they represent different underlying motivations and should not automatically be treated as interchangeable.

Affective commitment refers to employees' emotional attachment to, identification with, and involvement in the organization. Employees with strong affective commitment remain connected to the organization because they want to do so. Continuance commitment concerns employees' perceptions of the costs of leaving, including potential loss of benefits or difficulty finding comparable alternatives. Normative commitment, in contrast, reflects a sense of obligation to remain with the organization and fulfill its responsibilities. These distinctions provide a more comprehensive understanding of why employees maintain their organizational relationships.

In the context of business transformation, organizational commitment may be relevant, as employees are often required to learn new procedures, adapt to revised work arrangements, and contribute to shifting organizational priorities. Employees who identify with the organization may be more willing to support its objectives and participate in transformation

activities. However, the relationship between commitment and transformation should be treated as an empirical proposition rather than an assumption that committed employees will necessarily ensure successful change.

The operationalization of organizational commitment also requires careful consideration. If the study employs an overall commitment score, the measurement rationale should explain how the selected indicators represent the intended construct and whether the three components are combined or modeled separately. Evidence from the measurement model should support the chosen specification. This is particularly important because affective, continuance, and normative commitment represent conceptually distinct dimensions that may not relate to organizational transformation in identical ways.

Business Transformation

Business transformation is a coordinated process by which an organization renews its strategic direction, business processes, capabilities, and operating routines to respond to changing internal and external demands. Unlike isolated operational improvements, transformation may involve broader changes in how an organization creates value, deploys resources, adopts technologies, and aligns its activities with long-term strategic priorities. (Gouillart and Kelly 1995) provide an early perspective on organizational transformation, whereas the broader transformation literature emphasizes aligning strategic objectives with changes in organizational processes, people, and technology.

For organizations operating in the energy sector, business transformation may involve digitalization, operational improvements, the development of new capabilities, strategic adaptation, and initiatives that support more sustainable business activities. These changes require coordination across organizational functions because technology adoption or process redesign alone may not be sufficient to achieve broader transformation objectives. Organizational readiness, team member participation, leadership direction, and the capacity to adjust established routines may also influence how transformation initiatives are experienced and implemented.

In this study, business transformation is operationalized through employees' perceptions of business-model renewal, digitalization, process improvement, operational efficiency, strategic adaptability, and sustainability-oriented change. Accordingly, the construct represents perceived transformation-related capabilities and progress from the team member perspective. It should not be interpreted as an objective measure of company-wide transformation performance unless the survey-based indicators are supplemented or validated using independent organizational evidence. The final indicators should also be consistent with the questionnaire actually administered and supported by relevant theoretical and empirical literature.

Conceptual Framework

Drawing on Dynamic Capabilities Theory and the preceding discussion of the research constructs, this study proposes a framework linking dynamic Leadership, organizational commitment, and business transformation. Dynamic Leadership is specified as the exogenous construct, organizational commitment as the mediating construct, and business transformation as the outcome construct. The framework incorporates both a direct relationship between dynamic Leadership and business transformation and an indirect relationship operating through organizational commitment.

The direct path from dynamic Leadership to business transformation represents the expectation that adaptive decision-making, strategic communication, and support for change may be associated with employees' perceptions of organizational transformation. The path from dynamic Leadership to organizational commitment suggests that leadership practices shape employees' identification with and attachment to the organization. The path from organizational commitment to business transformation posits that employees' psychological connection to the organization may be linked to their perceptions of transformation-related activities. Finally, the mediating path considers whether organizational commitment statistically accounts for part of the relationship between dynamic Leadership and business transformation. The proposed relationships are summarized in Table 1.

Table 1. Research Hypotheses and Proposed Relationships

Hypothesis	Proposed relationship	Path
H1	Dynamic Leadership is positively associated with business transformation.	DL → BT
H2	Dynamic Leadership is positively associated with organizational commitment.	DL → OC
H3	Organizational commitment is positively associated with business transformation.	OC → BT
H4	Organizational commitment mediates the relationship between dynamic Leadership and business transformation.	DL → OC → BT

Source: Developed by the authors.

Figure 1 should illustrate these four proposed relationships, with dynamic Leadership (DL) positioned as the predictor, organizational commitment (OC) as the mediator, and business transformation (BT) as the outcome. The framework distinguishes the direct DL–BT path from the indirect DL–OC–BT pathway, thereby allowing the mediating role of organizational commitment to be examined explicitly.

Hypothesis Development

Dynamic Leadership and Business Transformation (H1)

Business transformation requires organizations to respond to changing conditions while maintaining alignment between strategic objectives and operational activities. Leaders may contribute to this process by interpreting environmental developments, communicating a clear direction, facilitating coordination, and supporting the mobilization of organizational resources. These behaviors may help employees understand transformation priorities and perceive that the organization is capable of adapting its processes and capabilities to emerging demands.

In the energy sector, where organizations face evolving technological, regulatory, and sustainability requirements, leadership adaptability may be particularly relevant to implementing transformation initiatives. When leaders communicate the rationale for change and support adjustments to established work practices, employees may develop more favorable perceptions of the organization's transformation efforts. Accordingly, this study proposes the following hypothesis:

H1: Dynamic Leadership is positively associated with business transformation.

Dynamic Leadership and Organizational Commitment (H2)

Organizational commitment may be shaped in part by employees' experiences with Leadership, including how decisions are communicated, how concerns are addressed, and whether employees perceive that organizational priorities are explained consistently. Leaders who communicate transparently, respond constructively to team member concerns, and

involve employees in organizational change may help strengthen employees' sense of connection with the organization. Conversely, unclear communication and inconsistent leadership practices may create uncertainty and weaken employees' identification with organizational objectives. Dynamic Leadership may therefore be associated with organizational commitment by helping employees understand the direction of change and their role in achieving organizational goals. In transformation settings, this relationship is particularly relevant because employees' attitudes toward the organization may influence how they respond to changing responsibilities and expectations. Based on this reasoning, the following hypothesis is proposed:

H2: Dynamic Leadership is positively associated with organizational commitment.

Organizational Commitment and Business Transformation (H3)

The implementation of business transformation often requires employees to adjust established routines, acquire new skills, collaborate across organizational boundaries, and maintain their efforts while organizational processes evolve. Employees who identify with the organization may be more willing to engage with these demands and support initiatives that are consistent with organizational objectives. Organizational commitment may therefore be associated with employees' perceptions of the organization's ability to implement and sustain transformation-related changes. Nevertheless, commitment alone does not guarantee successful business transformation. Transformation outcomes may also depend on the availability of resources, the quality of implementation, organizational governance, technological infrastructure, and external conditions. Within the scope of this study, the proposed relationship concerns the association between organizational commitment and employees' perceptions of business transformation rather than a claim that commitment independently determines company-wide transformation performance. Accordingly, the following hypothesis is proposed:

H3: Organizational commitment is positively associated with business transformation.

The Mediating Role of Organizational Commitment (H4)

The relationship between dynamic Leadership and business transformation may involve both direct and indirect pathways, the latter through employees' organizational commitment. Adaptive leadership practices may help employees understand organizational priorities, respond to changing expectations, and maintain a stronger psychological connection with the organization. This commitment may, in turn, be associated with greater team member willingness to support transformation-related activities and more favorable perceptions of transformation progress. From this perspective, organizational commitment is proposed as a potential mediating mechanism linking dynamic Leadership with business transformation. The mediation hypothesis does not assume that the indirect relationship necessarily exists; rather, it requires empirical evaluation. The indirect effect should be assessed using an appropriate statistical procedure, such as bootstrapping, and interpreted based on its estimated magnitude and confidence interval. The significance of the individual paths alone is insufficient to establish mediation. On this basis, the following hypothesis is proposed:

H4: Organizational commitment mediates the relationship between dynamic Leadership and business transformation.

METHOD

Research Design, Population, and Sampling

This study employs an explanatory quantitative research design using a cross-sectional survey to examine the relationships among dynamic Leadership, organizational commitment, and business transformation. The proposed relationships are estimated using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 4. This approach enables the assessment of the measurement properties of the research constructs and the estimation of the direct and indirect relationships specified in the conceptual framework. Because the data are collected at a single point in time, the findings are interpreted in terms of statistical associations rather than definitive causal effects (Hair et al., 2019).

The target population comprises employees of PT Pertamina (Persero) with direct exposure to business transformation initiatives. Purposive sampling is proposed to identify respondents whose work experience enables them to provide relevant assessments of leadership practices, organizational commitment, and transformation-related activities. The proposed eligibility criteria include at least 3 years of employment and a team leader, supervisor, or managerial position with direct involvement in a transformation program. These criteria should be applied consistently during respondent selection and reported transparently in the final manuscript.

The research instrument is reported to contain 44 measurement indicators. However, the final number of indicators, the questionnaire distribution process, and the achieved sample size must be confirmed against the actual research records. The final manuscript should report the number of questionnaires distributed, returned, excluded because of incomplete or invalid responses, and retained for statistical analysis. The data-collection period and relevant respondent characteristics should also be documented. The questionnaire or an appendix containing the measurement items should be provided where required by the journal. Sample adequacy should be established using a defensible statistical procedure, such as an a priori power analysis based on the proposed model, or another clearly justified criterion appropriate to PLS-SEM. The sample size should not be justified solely by reference to a general target range. The final report must use the actual number of eligible and valid responses obtained during data collection (Nilna Muna and I Putu Indra Wiguna, 2026).

Variable Measurement

The study uses a five-point Likert-type scale to measure respondents' perceptions of the research constructs. The response anchors must correspond to those presented in the questionnaire administered to respondents. If the instrument uses a scale ranging from 1 = strongly disagree to 5 = strongly agree, this coding should be stated explicitly in the manuscript. To ensure transparency and reproducibility, the final paper should identify the sources of the measurement items, explain any adaptation or translation procedures, and report pilot testing or other instrument-validation procedures when applicable. Representative questionnaire items may also be included in a table or appendix.

Dynamic Leadership is conceptualized as a leadership-related construct encompassing strategic sensing, adaptive decision-making, empathetic communication, resource mobilization, support for innovation, and the reconfiguration of practices in response to change. These dimensions are intended to capture employees' perceptions of leadership behaviors that may support organizational adaptation and transformation. The measurement items should be mapped to clearly defined dimensions and supported by appropriate sources.

In addition, the instrument must distinguish leadership behaviors from firm-level dynamic capabilities to maintain conceptual consistency between the theoretical framework and the empirical measurement model.

Organizational commitment is grounded in the three-component framework proposed by Meyer, Allen, and Smith (1993), which distinguishes among affective, continuance, and normative commitment. The final measurement specification should explain how each component is represented in the questionnaire and whether the construct is modeled through separate first-order dimensions or as a higher-order construct. The selected specification should be supported by theoretical rationale and measurement evidence from the data. Business transformation is operationalized through employees' perceptions of business model innovation, digitalization and process automation, decarbonization or green energy adoption, operational efficiency, strategic agility, and sustainability-oriented performance. These dimensions reflect the broad organizational changes considered relevant to the study's energy-sector context. Each dimension should be defined operationally and linked to the corresponding questionnaire items. Because the data are based on team member responses, the resulting construct represents perceived transformation-related capabilities or progress rather than independently audited measures of company-wide performance.

Data Analysis

The data are analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) in SmartPLS 4. The analysis comprises two main stages: evaluation of the measurement model and assessment of the structural model. Before estimating the model, the dataset should be screened for missing values, invalid responses, and other data-quality concerns. Any data-cleaning procedures and the treatment of missing observations should be documented to ensure transparency in the analytical process.

The measurement model is evaluated to establish the reliability and validity of the indicators and constructs. Indicator reliability is examined through outer loadings, while convergent validity is assessed using the Average Variance Extracted (AVE). Internal consistency reliability is evaluated using appropriate measures, including Cronbach's Alpha and Composite Reliability. Outer loadings around or above 0.70, AVE values of at least 0.50, and reliability estimates of at least 0.70 are commonly used reference points. Nevertheless, these thresholds should be interpreted alongside the theoretical relevance of the indicators and the overall evidence for measurement rather than applied mechanically. Indicators that do not meet a particular threshold should be assessed carefully before any decision to retain or remove them.

Discriminant validity is examined using the Heterotrait–Monotrait ratio (HTMT), with its confidence interval considered where available. The Fornell–Larcker criterion may also be reported as supplementary evidence. The assessment should establish whether the constructs are empirically distinguishable and whether their indicators adequately represent the concepts specified in the theoretical framework. The results should be presented using the actual output generated by SmartPLS and interpreted in accordance with the selected measurement specification.

Following the measurement-model assessment, the structural model is evaluated to examine the hypothesized relationships. The analysis should report collinearity diagnostics, standardized path coefficients, confidence intervals, p-values, and the coefficient of determination (R^2) for each endogenous construct. Effect sizes (f^2) should be reported to indicate the relative contribution of individual predictor constructs where appropriate.

Predictive assessment may also be included when it is consistent with the study's objectives and analytical design. All reported statistics must correspond to the final estimated model.

The mediating role of organizational commitment is tested by estimating the indirect effect of dynamic Leadership on business transformation through organizational commitment. Bootstrapping, preferably using 5,000 resamples, is used to obtain the indirect-effect estimate and its confidence interval. The mediation hypothesis is evaluated directly from this indirect effect rather than inferred solely from the significance of the individual paths. The direct effect should also be considered when interpreting the mediation results, allowing the findings to distinguish between the direct and indirect relationships operating through organizational commitment.

Given the cross-sectional survey design, the results provide evidence concerning the relationships specified in the proposed model but do not, on their own, establish temporal precedence or definitive causality. Accordingly, the interpretation of the findings should remain consistent with the research design, measurement limitations, and empirical evidence from the analysis (Hair et al., 2022).

RESULTS AND DISCUSSION

Results

Measurement Model Assessment

The measurement model was assessed to examine the reliability and validity of the constructs used in the proposed research framework. The assessment focused on internal consistency reliability, convergent validity, and discriminant validity for business transformation (BT), dynamic leadership (DL), and organizational commitment (OC). The reported statistics should be interpreted in conjunction with the indicator loadings, construct definitions, and final measurement specification. All numerical values in this draft require verification against the actual SmartPLS output before they can be reported as empirical findings.

Convergent Validity and Reliability

Convergent validity and internal consistency reliability were evaluated using Cronbach's Alpha, rho_A, Composite Reliability (rho_C), and Average Variance Extracted (AVE). These measures provide complementary evidence concerning the consistency of the indicators and the extent to which each construct explains the variance of its indicators. Table 2 presents the current draft values for the three constructs.

Table 2. Construct Reliability and Convergent Validity

Construct	Cronbach's Alpha	rho_A	Composite Reliability (rho_C)	AVE
Business Transformation (BT)	0.884	0.887	0.910	0.670
Dynamic Leadership (DL)	0.901	0.904	0.923	0.667
Organizational Commitment (OC)	0.876	0.879	0.910	0.772

Source: Current draft; all values must be verified against the final SmartPLS output.

The values presented in Table 2 are above commonly used reference points for internal consistency reliability, while the AVE values exceed the recommended minimum of 0.50. If confirmed by the final analysis, this pattern would indicate satisfactory internal consistency and convergent validity for the three constructs. Nevertheless, these statistics alone are insufficient to establish the overall adequacy of the measurement model. The indicator

loadings and the theoretical relevance of each item must also be examined before the final measurement specification is accepted.

Any decision to remove an indicator should consider both statistical evidence and conceptual coverage. An indicator should not be excluded solely to improve reliability or AVE if its removal would weaken the representation of an important dimension of the construct. Accordingly, the final report should document any excluded indicators, explain the reasons for their exclusion, and ensure that the reported results align with the questionnaire and model used in the final analysis.

Discriminant Validity

Discriminant validity was examined in the proposed analysis to determine whether business transformation, dynamic Leadership, and organizational commitment represent empirically distinguishable constructs. The Fornell–Larcker criterion provides one means of assessing discriminant validity by comparing the square root of each construct's AVE with its correlations with the other constructs. Table 3 presents the current draft matrix.

Table 3. Fornell–Larcker Criterion

Construct	BT	DL	OC
Business Transformation (BT)	0.819		
Dynamic Leadership (DL)	0.620	0.817	
Organizational Commitment (OC)	0.580	0.440	0.879

Note: Diagonal values represent the square roots of AVE; off-diagonal values represent inter-construct correlations.

Source: Current draft; all values must be verified against the final SmartPLS output.

Based on the values presented in Table 3, the diagonal entries exceed the corresponding inter-construct correlations. If the final analysis confirms the values, this pattern would be consistent with the Fornell–Larcker criterion. However, the matrix should not be treated as conclusive evidence of discriminant validity until the underlying SmartPLS output has been checked.

The Heterotrait–Monotrait ratio (HTMT) should also be reported to provide additional evidence regarding the distinctiveness of the constructs. The final manuscript should include the HTMT values for all three construct pairs: DL–OC, DL–BT, and OC–BT. Where available, bootstrap confidence intervals should be examined alongside the selected HTMT threshold. Because the current draft does not contain verified HTMT coefficients, no definitive conclusion regarding the HTMT assessment can yet be drawn.

The manuscript also reports that 44 indicators load most strongly on their intended constructs. This statement should be retained only if the final indicator-level output supports it. The authors should verify the indicator codes, construct assignments, and load values against the administered questionnaire and final SmartPLS model. Cross-loadings or other diagnostics should be reported only when they have been generated and reviewed as part of the actual analysis.

Structural Model Assessment

After establishing the adequacy of the measurement model, the structural model is assessed to examine the relationships among dynamic Leadership, organizational commitment, and business transformation. The assessment includes the explanatory power of the endogenous constructs, the estimated path coefficients, and the indirect effect associated

with the proposed mediating role of organizational commitment. The interpretation of these results must be based on the final estimated model and verified statistical output.

Coefficient of Determination

The coefficient of determination (R^2) indicates the proportion of variance in an endogenous construct explained by its predictor constructs. In the proposed research framework, organizational commitment is predicted by dynamic Leadership, while business transformation is predicted by organizational commitment. Dynamic Leadership is specified as an exogenous construct and therefore should not be reported as an endogenous outcome in the R^2 table unless the conceptual model is changed and justified.

Table 4. Coefficient of Determination

Endogenous Construct	R^2	Adjusted R^2
Organizational Commitment (OC)	0.194	0.191
Business Transformation (BT)	0.268	0.262

Source: Current draft; all values must be verified against the final SmartPLS output.

The values in Table 4 indicate the explanatory power attributed to the predictors in the proposed model, subject to verification. If confirmed, an R^2 of 0.194 for organizational commitment would mean that dynamic Leadership accounts for 19.4% of the variance in organizational commitment. Similarly, an R^2 of 0.268 for business transformation would indicate that dynamic Leadership and organizational commitment jointly account for 26.8% of the variance in business transformation.

These values should be interpreted in relation to the research context, model complexity, and relevant prior studies rather than classified using a universal threshold alone. The final structural model assessment should also report collinearity diagnostics and effect sizes (f^2 , f^2), where applicable, to provide a more comprehensive evaluation of the proposed relationships. Any predictive assessment should be included only if the corresponding procedure was conducted and its results are available.

Hypothesis Testing

The proposed hypotheses concern the direct relationships among dynamic Leadership, business transformation, and organizational commitment. The fourth hypothesis examines the indirect relationship between dynamic Leadership and business transformation through organizational commitment. Table 5 summarizes the path estimates currently included in the draft.

Table 5. Structural Path Estimates and Hypothesis Testing

Structural Path	Original Sample (β)	t-statistic	p-value	Status in Current Draft
Dynamic Leadership → Business Transformation	0.310	4.620	< 0.001	Requires verification
Dynamic Leadership → Organizational Commitment	0.440	7.180	< 0.001	Requires verification
Organizational Commitment → Business Transformation	0.300	4.310	< 0.001	Requires verification
DL → OC → BT (indirect effect)	0.132	3.520	< 0.001	Requires verification
Total effect: DL → BT	0.442	—	—	Requires verification

Source: Current draft; all coefficients, test statistics, and p-values must be checked against the final SmartPLS output.

The path coefficients in Table 5 describe the relationships specified in the structural model. The direct path from dynamic Leadership to business transformation represents the association between Leadership and perceived transformation when organizational commitment is included in the model. The path from dynamic Leadership to organizational commitment captures the association between leadership perceptions and employees' psychological attachment to the organization. Meanwhile, the path from organizational commitment to business transformation represents the association between commitment and employees' perceptions of transformation-related capabilities and progress.

The indirect effect represents the pathway from dynamic Leadership to business transformation through organizational commitment. In the current draft, the indirect-effect estimate of 0.132 corresponds mathematically to the product of the two specified path coefficients, 0.440 and 0.300. Adding this value to the direct-effect estimate of 0.310 yields a total effect of 0.442. These calculations are internally consistent with the coefficients shown in the table, but they do not establish that the estimates are empirically correct or statistically significant.

The final hypothesis decisions must be based on the verified bootstrap output, including the estimated effects, t-statistics, p-values, and confidence intervals. In particular, the mediation hypothesis should be assessed directly from the bootstrapped indirect effect and its confidence interval. The significance of the individual paths is not, by itself, sufficient to establish mediation. The direct and indirect effects should be interpreted together to determine whether the evidence supports the proposed mediating role of organizational commitment.

Discussion

The relationships proposed in this study provide a basis for examining how leadership practices and team member attitudes may be associated with business transformation in an energy-sector organization. The final discussion should interpret each verified finding in relation to the theoretical framework, compare it with relevant empirical research, and explain its implications for the organizational context. Because the numerical results in the current draft have not yet been verified, the following discussion identifies the interpretation that would be appropriate if the final analysis supported the corresponding relationships.

Dynamic Leadership and Business Transformation

If the final analysis establishes a positive and statistically significant relationship between dynamic Leadership and business transformation, the finding would be consistent with the argument that adaptive leadership practices are associated with more favorable team member perceptions of organizational transformation. Leaders who communicate strategic priorities, respond to emerging challenges, and facilitate coordination may help employees understand the direction of change and their contribution to transformation initiatives.

This interpretation is relevant to the energy sector, where organizations must respond to technological developments, regulatory changes, and sustainability-related demands. Nevertheless, the strength of the conclusion should remain aligned with the study's measurement approach. Because business transformation is measured through team member perceptions, the result would indicate an association with perceived transformation rather than independently establish the organization's objective transformation performance. The final

manuscript should compare the verified finding with previous studies and explain whether the result reinforces, extends, or differs from existing evidence.

Dynamic Leadership and Organizational Commitment

A positive relationship between dynamic Leadership and organizational commitment, if supported by the final results, would suggest that employees' perceptions of leadership practices are associated with their psychological attachment to the organization. Clear communication, responsiveness to team member concerns, and consistent direction during organizational change may help employees understand organizational priorities and their role in achieving them.

This relationship may be particularly relevant when transformation changes established work practices or creates uncertainty about responsibilities and future expectations. However, the interpretation should be grounded in the specific dimensions of dynamic Leadership and organizational commitment measured in the study. The discussion should also consider alternative explanations and compare the results with relevant empirical findings rather than treating the relationship as universally applicable.

Organizational Commitment and Business Transformation

If the verified analysis demonstrates a positive relationship between organizational commitment and business transformation, the finding would indicate that stronger team member attachment to the organization is associated with more favorable perceptions of transformation-related activities. Employees who identify with organizational objectives may be more willing to learn revised procedures, cooperate across functional boundaries, and sustain their involvement as organizational routines change.

However, organizational commitment is not a uniform construct. Affective commitment, continuance commitment, and normative commitment reflect different motivations for maintaining an organizational relationship and may not have identical implications for team member responses to change. The final interpretation should therefore reflect how commitment was operationalized and whether its dimensions were modeled separately or combined. It should also acknowledge that transformation depends on factors beyond team member commitment, including resources, technology, governance, and the quality of implementation.

The Mediating Role of Organizational Commitment

The proposed mediation model considers whether organizational commitment helps explain the relationship between dynamic Leadership and business transformation. If the bootstrapped indirect effect is statistically supported, the finding would provide evidence that part of the relationship between leadership perceptions and perceived transformation operates through organizational commitment. This would offer a more detailed explanation than examining the direct relationship between Leadership and transformation alone.

The conclusion regarding mediation must be based on the indirect-effect estimate and its bootstrap confidence interval. The direct effect should also be considered when describing the pattern of mediation. The discussion should avoid classifying the relationship as partial or full mediation without sufficient statistical evidence and a clear explanation of the criteria used. In addition, the cross-sectional design limits the ability to establish the temporal sequence of leadership practices, team member commitment, and transformation outcomes.

The mediation results should therefore be interpreted as evidence consistent with the proposed statistical mechanism rather than definitive proof of a causal process.

Theoretical and Managerial Implications

The study has the potential to contribute to research on organizational transformation by examining a leadership-related construct alongside a team member psychological mechanism in the context of an Indonesian energy-sector organization. Its theoretical contribution should be established through a direct comparison with prior studies, identifying which relationships have been examined previously, what remains insufficiently explained, and how the present model addresses that gap. The organizational context alone should not be presented as sufficient evidence of theoretical novelty.

From a managerial perspective, verified findings may inform leadership development and employee-engagement practices during transformation initiatives. Depending on the empirical results, practical considerations may include clearly communicating strategic priorities, involving employees in change processes, addressing concerns about new work practices, and aligning leadership behavior with organizational transformation objectives. These recommendations should be explicitly linked to empirically supported findings, rather than presented as demonstrated effects when the evidence does not support them.

Finally, the study's interpretation should acknowledge its methodological limitations. The use of team member self-reports may introduce common-method concerns, while the cross-sectional design limits causal inference. The reliance on perceived transformation also means that the findings should not be automatically generalized to objective, company-wide outcomes. Future research could strengthen the evidence by collecting data at multiple time points, incorporating independent organizational indicators, or examining the proposed relationships across different organizational units and energy-sector settings.

CONCLUSION

This study addresses the challenge of achieving business transformation in Indonesia's energy sector amid technological disruption, global commodity price fluctuations, and the transition toward Net Zero Emissions (NZE) 2060. It examines the proposed relationship between Dynamic Leadership and Business Transformation, with Organizational Commitment serving as a mediating variable, particularly in the context of PT Pertamina (Persero). The conceptual framework highlights the potential role of adaptive and proactive leadership in supporting business transformation, both directly and indirectly by strengthening employees' organizational commitment. It emphasizes that leadership development, employee involvement, transparent communication, and effective change management may provide important foundations for organizational adaptation. Nevertheless, the proposed relationships and mediation mechanism require validation through actual research data and appropriate statistical analysis. Accordingly, no definitive empirical conclusions regarding PT Pertamina (Persero) can be drawn until the research findings have been verified.

From a managerial perspective, organizations in the energy sector should consider integrating adaptive leadership development with initiatives that strengthen employee commitment and participation in transformation processes. These efforts should be supported by clear strategic communication, psychologically safe feedback channels, and systematic evaluation of transformation outcomes. Although these organizational practices may support the implementation of energy-transition initiatives, their contribution to national emission-

reduction targets also depends on broader regulatory, technological, infrastructural, and financial conditions. Future research should validate the proposed framework using a transparent PLS-SEM procedure, including measurement-model evaluation, structural-model assessment, and bootstrapping to test indirect effects. Longitudinal studies, multi-organizational samples, and objective business-transformation indicators are also recommended to strengthen the robustness and generalizability of future findings. Ultimately, understanding the interaction between dynamic leadership, organizational commitment, and business transformation may help energy-sector organizations develop more adaptive, resilient, and sustainable strategies.

Limitations and Future Research

Several limitations should be considered when interpreting this study. First, the focus on a single organizational setting may limit the generalizability of future findings to other energy-sector organizations. Second, purposive sampling may introduce selection bias and restrict the representativeness of the sample. Third, a cross-sectional design and self-reported employee perceptions may limit the ability to establish temporal relationships and may introduce common-method bias. Fourth, the proposed framework focuses on three constructs and does not incorporate other factors that may influence business transformation, such as organizational culture, technological readiness, and external regulatory pressures. Future research should address these limitations by employing longitudinal research designs, collecting data from multiple organizations, and incorporating objective indicators of business-transformation performance. Researchers should also report the final sample size, sampling procedures, questionnaire items and their sources, reliability and validity assessments, structural-path coefficients, explanatory and predictive measures, and bootstrapped confidence intervals for indirect effects. Where appropriate, robustness checks and alternative model specifications should be considered. These improvements would provide a stronger empirical basis for evaluating the proposed relationships and clarifying the role of Organizational Commitment in the relationship between Dynamic Leadership and Business Transformation.

REFERENCES

- Allen, N. J, & John P Meyer. (1990). "The Measurement and Antecedents of Affective, Continuance and Normative Commitment to the Organization." *Journal of Occupational Psychology* 63(1): 1–18.
- Eisenhardt, Kathleen M, and Jeffrey A Martin. 2000. "Dynamic Capabilities: What Are They?" *Strategic Management Journal* 21(10–11): 1105–21.
- Gouillart, F. J, & James N Kelly. (1995). *Transforming the Organization*. New York: McGraw-Hill.
- Hair, Joseph F, G Tomas M Hult, Christian M Ringle, and Marko Sarstedt. 2022. *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. 3rd ed. Thousand Oaks, CA: SAGE Publications.
- Hair, Joseph F, Jeffrey J Risher, Marko Sarstedt, and Christian M Ringle. 2019. "When to Use and How to Report the Results of PLS-SEM." *European Business Review* 31(1): 2–24.
- Helfat, Constance E et al. 2007. *Dynamic Capabilities: Understanding Strategic Change in Organizations*. Malden, MA: Blackwell Publishing.

- Meyer, J. P, & Natalie J Allen. (1991). "A Three-Component Conceptualization of Organizational Commitment." *Human Resource Management Review* 1(1): 61–89.
- Meyer, J. P, Natalie J Allen, & Catherine A Smith. (1993). "Commitment to Organizations and Occupations: Extension and Test of a Three-Component Conceptualization." *Journal of Applied Psychology* 78(4): 538–51.
- Meyer, J. P, & Lynne Herscovitch. (2001). "Commitment in the Workplace: Toward a General Model." *Human Resource Management Review* 11(3): 299–326.
- Meyer, J. P, David J Stanley, Lynne Herscovitch, & Laryssa Topolnytsky. (2002). "Affective, Continuance, and Normative Commitment to the Organization: A Meta-Analysis of Antecedents, Correlates, and Consequences." *Journal of Vocational Behavior* 61(1): 20–52.
- Nilna Muna, and I Putu Indra Wiguna. 2026. "Analysis of the Role of Customer Engagement in Mediating the Effect of Video Information Quality and Perceived Authenticity on Purchase Intention: A Study on Kick Avenue TikTok." *Al-Kharaj: Journal of Islamic Economic and Business* 8(1 SE-Articles).
- Oreg, S., Maria Vakola, & Achilles Armenakis. (2011). "Change Recipients' Reactions to Organizational Change: A 60-Year Review of Quantitative Studies." *The Journal of Applied Behavioral Science* 47(4): 461–524.
- Teece, D. J. (2007). "Explicating Dynamic Capabilities: The Nature and Microfoundations of (Sustainable) Enterprise Performance." *Strategic Management Journal* 28(13): 1319–50.
- . 2014. "The Foundations of Enterprise Performance: Dynamic and Ordinary Capabilities in an (Economic) Theory of Firms." *Academy of Management Perspectives* 28(4): 328–52.
- Teece, D. J, Gary Pisano, & Amy Shuen. (1997). "Dynamic Capabilities and Strategic Management." *Strategic Management Journal* 18(7): 509–33.
- Verhoef, Peter C et al. (2021). "Digital Transformation: A Multidisciplinary Reflection and Research Agenda." *Journal of Business Research* 122: 889–901.
- Vial, G. (2019). "Understanding Digital Transformation: A Review and a Research Agenda." *The Journal of Strategic Information Systems* 28(2): 118–44.
- Warner, Karl S R, and Max Wäger. 2019. "Building Dynamic Capabilities for Digital Transformation: An Ongoing Process of Strategic Renewal." *Long Range Planning* 52(3): 326–49.
- Winter, S. G. (2003). "Understanding Dynamic Capabilities." *Strategic Management Journal* 24(10): 991–95.
- Yukl, G. A, & William L Gardner. (2020). *Leadership in Organizations*. 9th ed. Harlow: Pearson.