Driving Innovation in the Automotive Components Sector: Leveraging Transformational Leadership and Organizational Ambidexterity for Competitive Advantage

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Abstract. This study investigates the role of innovation in achieving competitive advantage within Indonesia's automotive components industry. Drawing on upper-echelon and resource-based theories, it examines how transformational leadership influences innovation performance, with organizational ambidexterity as a mediating factor. The research employed a quantitative approach, surveying top management from 100 Indonesian automotive component firms. Using PLS-SEM analysis of four hypotheses, the study found that while organizational ambidexterity significantly impacts innovation performance, transformational leadership does not directly affect it. However, transformational leadership indirectly influences innovation performance through organizational ambidexterity. These findings provide valuable insights for industry leaders, offering evidence-based strategies to enhance innovation capabilities. The research contributes to understanding leadership dynamics and innovation in emerging markets' rapidly evolving automotive supply chains, paving the way for future investigations in this field. The study's implications extend beyond the Indonesian context, offering potential applications in similar emerging markets and industries undergoing rapid technological changes.

Keywords: Organizational ambidexterity, Transformational Leadership, Innovation Performance, Competitive Advantage, Automotive Components Industry.

1. Introduction

The automotive industry is undergoing significant transformation, driven by technological disruptions identified by [1], including diverse mobility, autonomous driving, electrification, and connectivity. This requires automotive companies to adapt swiftly and innovate continuously. Transformational leadership has become critical in fostering a culture of innovation, enabling companies to adapt to technological advancements, and staying ahead in a rapidly evolving market, as [2] emphasized. The automotive components industry, a vital sector within the broader automotive landscape, faces unique challenges in this transformation, necessitating a deeper understanding of the relationship between leadership and innovation performance. Organizational

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ambidexterity, the ability to simultaneously explore new opportunities while exploiting existing capabilities, has emerged as a key factor in navigating this complex landscape [3].

2. Literature Review

This study integrates several key theories, including Upper Echelon Theory, Dynamic Capability Theory, and Resource-Based View (RBV) Theory, to comprehensively understand the relationships under investigation.

Upper Echelon Theory: As proposed by Mason [4], this theory posits that the characteristics and backgrounds of top managers significantly influence organizational outcomes and strategic decisions. [5] further highlighted the correlation between Upper Echelon Theory and Transformational Leadership, emphasizing the impact of transformational leadership on organizational performance.

Resource-Based View (RBV) Theory:[6] introduced RBV theory, which emphasizes the strategic importance of a firm's internal resources and capabilities in achieving sustained competitive advantage. [7] discussed the connection between the RBV theory and Innovation Performance, highlighting how organizations can leverage unique resources and capabilities to drive innovation, enhance performance, and maintain a competitive position in the market.

Transformational Leadership: [8] initiated research on transformational leadership, which involves inspiring and motivating followers to achieve extraordinary outcomes. [9] describe transformational leaders as inspiring employees to achieve higher performance levels and to transcend their self-interests for the organization's good.

Organizational Ambidexterity: First introduced by [10], refers to an organization's ability to effectively balance and excel in both exploratory (innovative) and exploitative (efficient) activities simultaneously. Researchers such as [11] have argued that organizations must maintain flexibility in managing strategic changes and adapting to discontinuous technological advancements.

3. Hypothesis Development

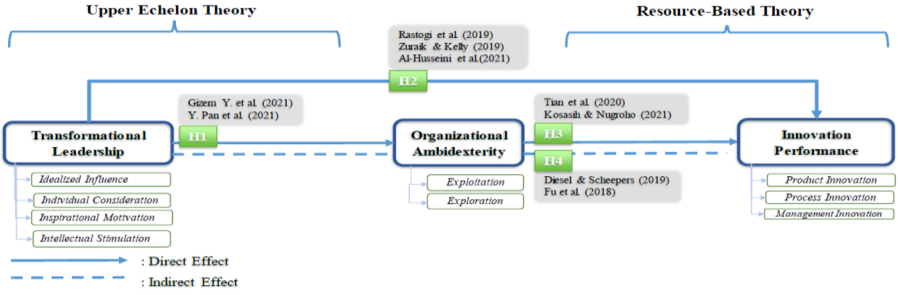

Figure 1. The conceptual framework

This study develops four key hypotheses:
H1: Transformational leadership positively relates to organizational ambidexterity in the automotive components industry. Previous studies from [12] and [13] support this hypothesis, suggesting that transformational leadership fosters organizational ambidexterity.
H2: Transformational leadership is positively associated with innovation performance in the automotive components industry. Research by [14], [15], and [16] suggest that transformational leadership is crucial in driving innovation.
H3: Organizational ambidexterity is positively related to innovation performance in the automotive components industry. Earlier studies from [17], [18], [19], and [20] support the notion that organizational ambidexterity contributes to superior innovation performance.
H4: Organizational ambidexterity in the automotive components industry mediates the relationship between transformational leadership and innovation performance. The assumption is supported by studies such as [21] and [22], highlighting the role of organizational ambidexterity.

4. METHODOLOGY

The research employs a deductive quantitative approach utilizing a survey research design with a 6-point Likert scale [23]. Data was collected from top management personnel (CEOs, Directors, or Owners) from 100 Indonesian automotive component companies. The study utilized a questionnaire carefully designed to capture relevant indicators based on established theoretical frameworks and prior literature [24]. A PLS-SEM analysis was conducted to analyze the complex relationships between the constructs [25].

5. Result

The study analyzed 100 valid questionnaires from automotive component companies, with most respondents (87%) being male and 73% having over 5 years of experience in the industry. The sample included a mix of executive positions, with 14% President Directors, 14% Vice President Directors, and 72% Directors.

The study used both HTMT and Fornell-Lacker criteria to evaluate discriminant validity, with results showing that variables measure their intended dimensions more effectively than others. This aligns with Hair et al. [26], which referenced [27], stating that HTMT is better at detecting discriminant validity.

Table 1: Discriminant validity

	Innovation Performance	Organizational Ambidexterity	Transfomational Leadership
Innovation Performance	0,918	**0,877**	**0,601**
Organizational Ambidexterity	0,817	0,940	**0,721**
Transfomational Leadership	0,566	0,678	0,900

Diagonal = root of AVE, value above the diagonal = HTMT and value below the diagonal = correlation

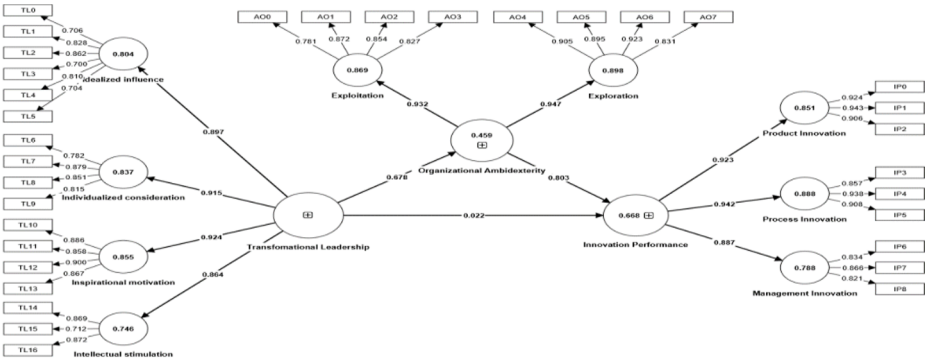

Figure 2. PLS Model Estimation

The study found that transformational leadership significantly boosts organizational ambidexterity (H1), strongly driving innovation performance (H3). However, transformational leadership doesn't directly impact innovation (H2). Organizational ambidexterity fully mediates the relationship between transformational leadership and innovation (H4), implying that leadership fosters innovation indirectly by enhancing ambidexterity. Product and process innovation showed the highest impact, while management innovation needs further development.

Table 2: Hypothesis Development

Hyphotesis	Hypothesis Statement	Original sample (O)	T statistics (|O/STDEV|)	P values	F Square	R Square	Q^2 Predict
H1	Transfomational Leadership -> Organizational Ambidexterity	0,678	10,786	0,000	0,850	0,459	0,446
H2	Transfomational Leadership -> Innovation Performance	0,022	0,275	0,783	0,001	0,668	0,304
H3	Organizational Ambidexterity -> Innovation Performance	0,803	10,796	0,000	1,051		
H4	Transfomational Leadership -> Organizational Ambidexterity -> Innovation Performance	0,544	7,177	0,000	0,296		

6. Discussion

Integrating Upper Echelons and Resource-Based theories provides key insights for automotive component sector leaders. Upper Echelons theory emphasizes that top management shapes innovation strategies [28]. The Resource-Based theory highlights leveraging internal assets for competitive advantage [29]. Transformational leadership motivates employees, and organizational ambidexterity balances exploring and exploiting opportunities [30]. The research indicates transformational leadership significantly boosts organizational ambidexterity, mainly through inspirational motivation, which aligns with studies by Morales et al, and Gizem et al. However, unlike findings in other industries, transformational leadership doesn't directly influence innovation performance in this sector. This suggests that Indonesia's automotive components innovation relies more on industry collaboration, established infrastructure, and partnerships with international firms [31]. Organizational ambidexterity, especially exploration-focused innovation, positively impacts innovation performance and mediates the relationship between leadership and innovation. This is supported by [32] and Jansen et al. (2006).

It demonstrates that transformational leaders can enhance innovation by building ambidextrous organizations (Lee et al., 2015; Choi et al., 2016). This framework helps industry leaders strategically plan, foster innovation, and achieve sustainable growth, providing a competitive edge.

7. Conclusion

This research examined the intermediary function of organizational ambidexterity in the relationship between transformational leadership and innovation performance within Indonesia's automotive components sector. The study analyzed data from 100 companies to assess how transformational leadership and organizational ambidexterity affect product innovation outcomes. Results indicate that transformational leadership significantly enhances organizational ambidexterity but does not directly impact innovation performance. Nevertheless, the findings suggest optimizing transformational leadership and organizational ambidexterity can improve innovation performance. The study addressed several key questions, including how transformational leadership influences innovation performance and the mediating role of organizational ambidexterity in Indonesia's automotive components industry. It also investigated how transformational leadership affects organizational learning and innovation aspects, explored organizational ambidexterity's role in creating an innovation-friendly environment, and considered the impact of Indonesia's emerging market dynamics on these relationships. By tackling these issues, the research aimed to fill a knowledge gap and provide empirical insights into how transformational leadership promotes innovation through organizational ambidexterity in the context of an emerging market's automotive components industry.

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