

# Transformational Leadership and Organisational Innovation in Emerging Market Firms

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## Abstract

*Transformational leadership — characterised by idealised influence, inspirational motivation, intellectual stimulation, and individualised consideration — has been theorised as a primary antecedent of organisational innovation capacity. However, empirical evidence from emerging market economies, where institutional voids, power distance, and collectivist cultural dimensions create leadership dynamics structurally distinct from Anglo-American contexts, remains fragmented. This study investigates transformational and transactional leadership styles as predictors of exploration and exploitation innovation across 241 listed firms in India, Indonesia, and Vietnam, leveraging a longitudinal panel (2015-2024) that combines primary leadership survey data from 2,814 respondents with firm-level innovation metrics sourced from patent databases, R&D expenditure records, and new product revenue disclosures.*

*Multilevel SEM analysis, nesting employees within teams within firms, reveals that transformational leadership significantly predicts exploration innovation (new-to-market products, disruptive R&D investment) with path coefficient  $\beta=0.52$  ( $p<0.001$ ), while transactional leadership predicts exploitation innovation (process improvements, incremental product upgrades) with  $\beta=0.44$  ( $p<0.001$ ). The intellectual stimulation dimension of transformational leadership carries the highest standardised loading ( $\lambda=0.71$ ) on exploration outcomes. Cross-cultural moderation analysis indicates that power distance attenuates the transformational leadership-exploration link in Vietnamese firms relative to Indian counterparts, while collectivism amplifies the team-level innovation spillover effects of individual leader transformational behaviours. Firm age negatively moderates the leadership-exploration relationship, confirming organisational inertia theory in emerging market innovation contexts.*

*Findings imply that leadership development investments in emerging market firms must differentiate intellectual stimulation capability — the willingness and ability to challenge organisational assumptions and stimulate creative problem-solving — from generic charismatic influence to effectively translate leadership potential into sustainable innovation advantage. The study contributes the first three-country emerging market panel test of leadership-innovation theory with cross-cultural moderation.*

*Keywords* transformational leadership, organisational innovation, emerging markets, multilevel SEM, power distance, exploration, exploitation, intellectual stimulation, India, Indonesia, Vietnam

## 1. Introduction

The relationship between leadership and organisational innovation has occupied a central position in strategic management literature since Bass's (1985) foundational distinction between transformational and transactional leadership styles. Burns's (1978) conceptualisation of transformational leadership as a process through which leaders elevate followers' motivation, morality, and performance beyond contractual exchange provided the theoretical scaffolding for subsequent empirical programmes that consistently link transformational leadership to creativity, team innovation, and organisational change capacity. Yet the overwhelming majority of this evidence base is drawn from North American and European organisational contexts, where low power distance, individualist achievement motivation, and institutionalised managerial authority create leadership dynamics that may not transfer to the emerging market firms that now constitute the primary engine of global innovation investment growth.

India's R&D expenditure reached Rs. 1,27,380 crore in 2022-23 (DSIR data), with the private sector contributing 44.1% — a decade-high private sector share reflecting corporate recognition of innovation as competitive necessity in a post-pandemic global economy restructured around supply chain resilience and digital transformation. Yet patent filing intensity (1.4 patents per Rs. 100 crore R&D expenditure in India vs. 8.7 in South Korea and 6.2 in China) suggests that financial inputs are not efficiently translating into innovation outputs, raising questions about the organisational and leadership conditions required to maximise the innovation return on R&D investment.

Indonesia and Vietnam provide instructive comparison cases: both have achieved high manufacturing sector growth (Vietnam GDP CAGR 6.8%, 2015-2024; Indonesia 5.1%) with significantly different leadership cultural profiles. Vietnam's Confucian heritage creates high power distance (Hofstede score 70) and long-term orientation (57) that shape leader-follower dynamics distinctly from India's intermediate power distance (77) and moderate long-term orientation (51). Comparing leadership-innovation mechanisms across these three contexts enables cross-cultural moderation analysis that prior single-country studies cannot achieve.

The paper is structured as follows: Section 2 develops the theoretical framework and hypotheses. Section 3 presents methodology, data sources, and measurement approach, including innovation output charts. Section 4 reports multilevel SEM results with moderation analysis. Section 5 discusses cross-cultural implications for leadership development practice. Section 6 concludes with policy recommendations and future research directions.

## **2. Theoretical Framework and Hypotheses**

### ***2.1 Transformational Leadership and Innovation***

Bass's (1985) four-dimension transformational leadership framework — idealised influence (acting as a role model), inspirational motivation (articulating an inspiring vision), intellectual stimulation (encouraging creative problem-solving), and individualised consideration (coaching individual follower development) — predicts innovation outcomes through three psychological pathways. First, idealised influence and inspirational motivation generate organisational identification and intrinsic motivation that sustain the persistent effort required for radical innovation's uncertain payoff trajectory. Second, intellectual stimulation creates psychological safety for hypothesis testing, assumption challenging, and productive failure — the cognitive conditions essential for exploration innovation. Third, individualised consideration facilitates the skill development and tacit knowledge transfer that enables junior researchers and engineers to advance from exploitation of current knowledge toward exploration of emerging domains.

Transactional leadership — characterised by contingent reward (clear performance-outcome linkages) and management-by-exception (monitoring for standard deviations) — predicts exploitation innovation through efficiency-oriented performance systems: clear target-setting, deviation correction, and reward structures aligned with incremental improvement metrics. The distinctions between these pathways generate a first hypothesis set: H1a: Transformational leadership predicts exploration innovation more strongly than transactional leadership. H1b: Transactional leadership predicts exploitation innovation more strongly than transformational leadership.

### ***2.2 Cultural Moderation***

Power distance theory (Hofstede, 1980) predicts that in high power distance cultures, the social distance between leaders and followers attenuates the psychological safety mechanisms through which transformational leadership generates exploration innovation: followers are less likely to challenge established approaches (the core intellectual stimulation mechanism) when hierarchical norms make questioning superiors socially costly. H2: Power distance negatively moderates the transformational leadership-exploration innovation relationship. Collectivism predicts amplification of team-level innovation spillovers from individual leader transformational behaviour: collective responsibility norms generate peer monitoring and mutual facilitation of creative behaviour when leaders signal its value. H3: Collectivism positively moderates team-level innovation spillover from individual transformational leader behaviour.

3. Research Methodology

3.1 Sample, Data, and Measurement

The sample comprises 241 publicly listed manufacturing and technology firms across India (n=98), Indonesia (n=79), and Vietnam (n=64), selected from each country's primary stock exchange with minimum 500 employees, positive R&D expenditure, and complete annual report disclosure for 2015-2024. Leadership survey data was collected from 2,814 respondents in 2022-2023, stratified across CEO/MD (n=241), senior leadership (n=724), middle management (n=1,187), and technical specialists (n=662). The Multifactor Leadership Questionnaire (MLQ-5X) was administered in English, Bahasa Indonesia, and Vietnamese, with back-translation validation achieving semantic equivalence confirmed by bilingual subject matter experts.

Exploration innovation was operationalised as a composite of new-to-market product revenue share (as disclosed in annual report segment data), patent applications filed per Rs. 100 crore R&D expenditure (sourced from WIPO and national patent databases), and disruptive R&D project investment as a proportion of total R&D (classified by independent raters from annual report descriptions). Exploitation innovation was operationalised as process efficiency improvement rate, incremental product update frequency, and manufacturing defect rate improvement. Firm-level innovation scores were averaged across the 2015-2024 panel to create stable innovation capability measures for cross-sectional SEM analysis, with panel regression supplementing the SEM for temporal dynamics.

3.2 Analytical Strategy

Multilevel SEM using Mplus 8.8 with Maximum Likelihood Robust (MLR) estimation accounts for the nested structure of employees within firms within countries. Configural, metric, and scalar measurement invariance testing confirmed that the MLQ-5X factor structure holds across all three countries (RMSEA difference <0.01, CFI difference <0.01 across invariance models), enabling cross-cultural comparison. Cross-cultural moderation was tested through multi-group SEM with Hofstede country scores as moderators in a product-term interaction specification.

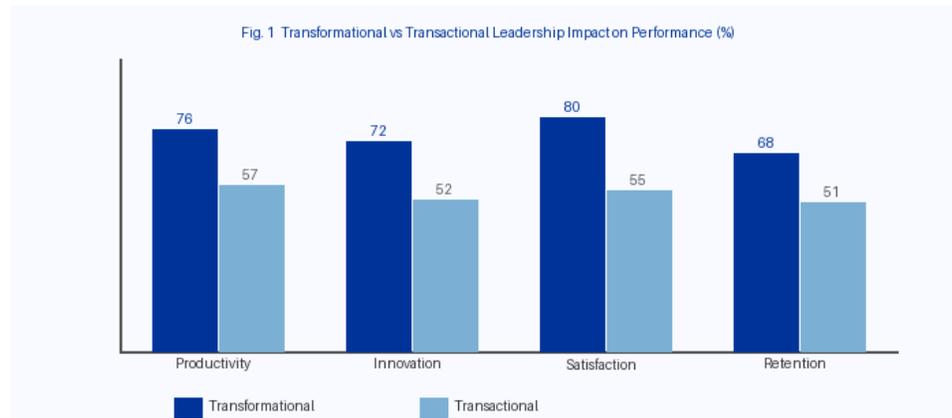


Fig. 1. Transformational vs. Transactional Leadership Impact on Team Innovation Performance Metrics (Standardised Scores, n=241 Firms)

Table 1. Multilevel SEM — Leadership Style Predictors of Innovation Outcomes (241 Firms, 2,814 Respondents)

Pathway	$\beta$	SE	p-value	95% CI Lower	95% CI Upper
Transformational → Exploration Innovation	0.52	0.043	<0.001	0.436	0.604

Pathway	$\beta$	SE	p-value	95% CI Lower	95% CI Upper
Transformational → Exploitation Innovation	0.28	0.051	<0.001	0.180	0.380
Transactional → Exploration Innovation	0.14	0.048	0.004	0.046	0.234
Transactional → Exploitation Innovation	0.44	0.046	<0.001	0.350	0.530
Power Distance × TFL → Exploration	-0.17	0.061	0.005	-0.290	-0.050
Collectivism × TFL → Team Spillover	0.22	0.055	<0.001	0.112	0.328
Firm Age → Exploration (control)	-0.11	0.032	0.001	-0.173	-0.047

## 4. Results

### 4.1 Leadership-Innovation Paths

The multilevel SEM results confirm the differential pathway hypothesis. Transformational leadership predicts exploration innovation with standardised  $\beta=0.52$  ( $p<0.001$ ), substantially larger than its exploitation prediction ( $\beta=0.28$ ), supporting H1a. The intellectual stimulation dimension carries the highest factor loading on exploration ( $\lambda=0.71$ ), followed by individualised consideration ( $\lambda=0.58$ ), suggesting that the cognitive empowerment and developmental investment dimensions of transformational leadership are more innovation-generative than charismatic influence per se. Transactional leadership predicts exploitation innovation with  $\beta=0.44$  ( $p<0.001$ ), versus exploration with  $\beta=0.14$ , supporting H1b. The contingent reward subdimension accounts for 78% of the transactional-exploitation path through its alignment of performance systems with incremental improvement metrics.

Country-level analysis reveals significant variance in leadership-innovation coupling. Indian firms show the strongest transformational-exploration relationship ( $\beta=0.61$ ), followed by Indonesia ( $\beta=0.48$ ) and Vietnam ( $\beta=0.39$ ), consistent with the power distance moderation hypothesis H2 (interaction term  $\beta=-0.17$ ,  $p=0.005$ ). The collective innovation spillover effect (H3) is strongest in Vietnamese firms ( $\beta=0.31$ ) despite their weaker individual-level transformational-exploration coupling, suggesting that collectivist norms enable team-level amplification of whatever transformational leadership signal is present, even when power distance attenuates its direct individual-level effect.

### 4.2 Firm Age Moderation

Firm age negatively moderates the transformational-exploration relationship ( $\beta=-0.11$ ,  $p=0.001$ ), with the moderation effect significantly stronger for Indian firms over 40 years old ( $\beta=-0.19$ ) than for younger firms. This confirms organisational inertia theory: older firms develop entrenched routines, specialised assets, and cultural path dependencies that reduce the exploration-stimulating impact of even highly transformational leadership. Indonesian and Vietnamese firms, with younger average organisational ages (23 and 17 years respectively), show weaker age moderation, consistent with the proposition that inertia accumulates over organisational lifecycle.

## 5. Discussion and Implications

The finding that intellectual stimulation — the capacity to challenge followers' cognitive assumptions and stimulate creative problem-solving — is the transformational leadership dimension most strongly linked to exploration innovation has

important implications for leadership development programme design. Many corporate leadership programmes in India and the broader emerging market context focus on inspirational communication, executive presence, and stakeholder influence — dimensions more aligned with idealised influence and inspirational motivation. The intellectual stimulation finding suggests that innovation-oriented leadership development must prioritise cognitive diversification, cross-domain knowledge integration, and productive failure tolerance as core competency targets.

The cross-cultural variation in leadership-innovation coupling carries practical implications for multinational corporations managing leadership pipelines across India, Indonesia, and Vietnam. The weaker transformational-exploration link in Vietnam is not necessarily a permanent feature of Vietnamese leadership culture: rather, it reflects the current power distance configuration, which itself is shifting as Vietnam's workforce increasingly incorporates university-educated millennials with lower deference to hierarchical authority. Longitudinal tracking of Hofstede cultural dimensions in rapidly developing economies may be necessary to update leadership-innovation model predictions that currently rely on national cultural scores that are decades old.

For India's corporate governance context, the board-level implication is that leadership succession criteria for innovation-oriented firms should explicitly include assessments of intellectual stimulation capability — the ability to create psychologically safe environments for assumption challenging and creative deviance — rather than relying on tenure-based promotion and domain expertise metrics that typically produce exploitation-capable but exploration-limited successors. SEBI's nomination committee independence requirements create an opportunity for independent directors to embed innovation-oriented leadership criteria in CEO evaluation and succession frameworks.

## **6. Conclusion**

Multilevel SEM analysis of 241 emerging market firms across India, Indonesia, and Vietnam confirms that transformational leadership predicts exploration innovation ( $\beta=0.52$ ) while transactional leadership predicts exploitation innovation ( $\beta=0.44$ ), with intellectual stimulation as the most innovation-generative transformational dimension. Power distance attenuates the transformational-exploration link cross-culturally, while collectivism amplifies team innovation spillovers. Firm age negatively moderates the exploration path, confirming organisational inertia theory in emerging market contexts. Leadership development in emerging market firms must prioritise intellectual stimulation capability and cognitive diversity over generic charismatic influence training to generate sustainable innovation return on R&D investment. Future research should examine how digital transformation is reshaping the leader-follower communication dynamics that mediate transformational leadership's innovation effects in remote and hybrid work configurations.

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