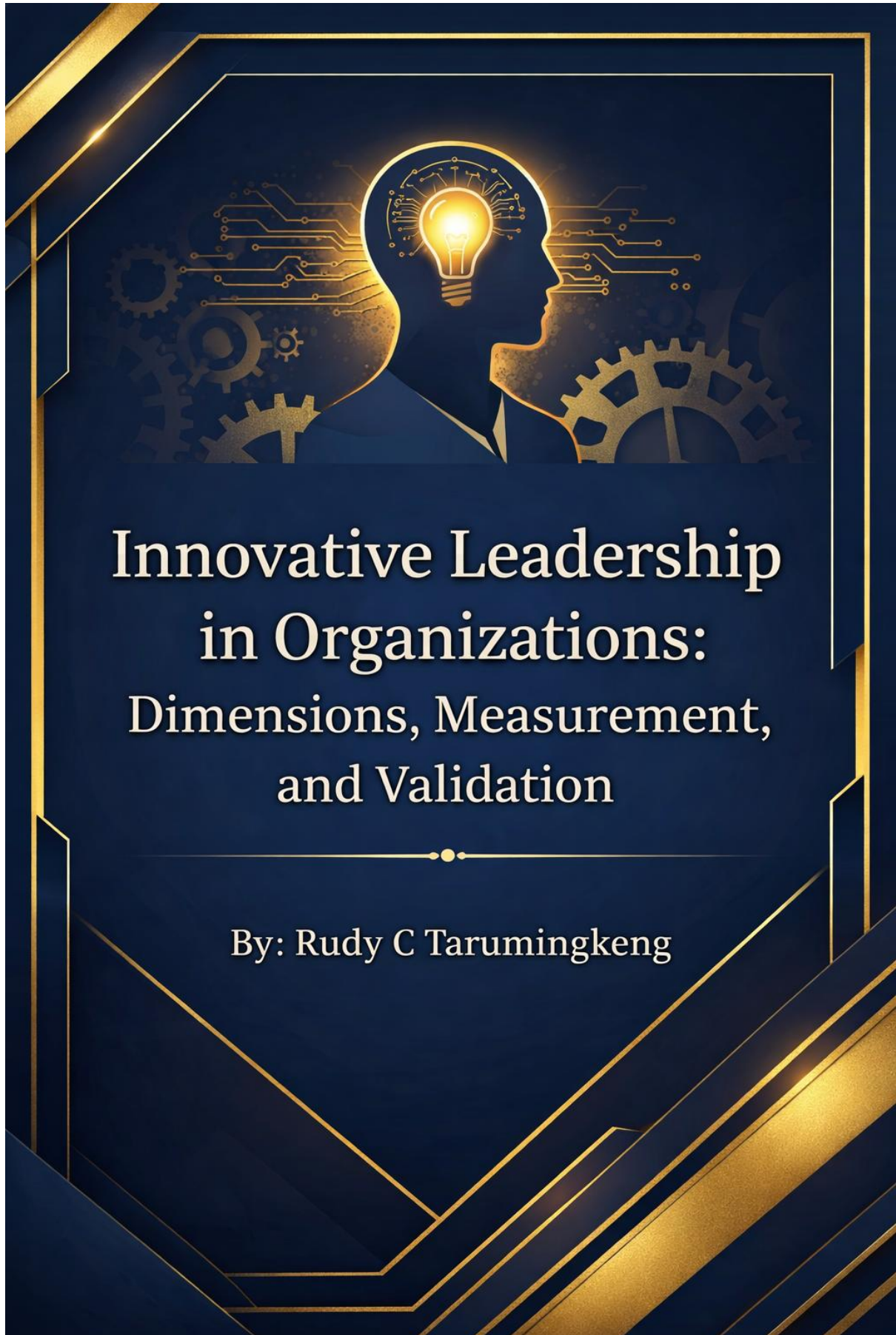




*Rudy C Tarumingkeng: Innovative leadership in organizations:  
Dimensions, measurement, and validation*

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## **INNOVATIVE LEADERSHIP IN ORGANIZATIONS: DIMENSIONS, MEASUREMENT, AND VALIDATION**

### **Abstract**

In contemporary organizations, innovation is no longer a peripheral activity reserved for research laboratories or technology firms. It has become a strategic necessity for survival, adaptation, and long-term value creation. Yet organizations frequently speak of “innovation leadership” without a sufficiently precise conceptualization of what such leadership actually entails, how it differs from adjacent leadership constructs, and how it should be measured in rigorous organizational research. This paper examines innovative leadership as a multidimensional organizational capability that links idea generation, social legitimization, structural enablement, and implementation discipline. Building on contemporary scholarship, especially recent construct-development work, the paper argues that innovative leadership should be understood not merely as a leader’s personal creativity but as a patterned set of cognitions, motivations, relational behaviors, and institutional practices that make innovation possible and sustainable. The discussion develops five core dimensions of innovative leadership: thinking creatively, holding the willpower to be innovative, tolerating different opinions and various risks, establishing mechanisms for innovation, and implementing innovation ideas. The paper then addresses the methodological challenge of measurement by distinguishing innovative leadership from related constructs such as transformational, inclusive, ambidextrous, and authentic leadership. It further reviews principles of construct development and

validation, including content validity, internal structure, convergent and discriminant validity, criterion-related validity, incremental validity, and measurement invariance. The paper concludes that innovative leadership is best treated as a multilevel, context-sensitive construct whose proper measurement requires conceptual clarity, psychometric discipline, and contextual adaptation. For scholars, this strengthens cumulative knowledge; for practitioners, it offers a more disciplined basis for leadership development, organizational diagnosis, and innovation governance. ([ScienceDirect](#))

**Keywords:** *innovative leadership, organizational innovation, leadership measurement, construct validation, psychometrics, innovative work behavior, organizational behavior*

## 1. Introduction

Innovation has become one of the defining imperatives of modern organizational life. In policy, management, and strategy discourse, innovation is not treated simply as novelty but as a new or improved product or process that differs significantly from prior practice and is actually implemented or introduced into use. This definitional emphasis is important because it separates organizational innovation from mere creativity, aspiration, or rhetorical enthusiasm. A firm may generate many novel ideas, yet without implementation these ideas remain unrealized potential rather than innovation in the full organizational sense. ([OECD](#))

The centrality of leadership in innovation follows from this distinction. If innovation involves not only generating ideas but also legitimizing them, resourcing them, coordinating them, and turning them into usable outcomes, then leadership becomes a crucial integrative force. Modern leadership research has moved well beyond trait-only approaches and now includes authentic, distributed, complexity, and relational perspectives,

indicating that leadership is increasingly understood as a socially embedded process rather than the mere exercise of formal authority. Within this broader research stream, the question is no longer whether leadership matters for innovation, but how specific forms of leadership encourage, organize, and validate innovation across individuals, teams, and organizations. ([PubMed](#))

A persistent problem, however, is conceptual ambiguity. In many organizations the phrase “innovative leader” is used loosely to describe someone charismatic, open-minded, digitally savvy, or willing to sponsor change. In research, too, innovative leadership has often been inferred indirectly from neighboring constructs such as transformational leadership, inclusive leadership, or innovative climate. This creates a measurement problem. If the construct is poorly specified, then empirical findings will remain difficult to compare, aggregate, and apply. Recent work in the *Journal of Business Research* is especially important because it directly addresses this gap, conceptualizing innovative leadership as a distinct construct and validating a dedicated Innovative Leadership Measure. That contribution provides a strong basis for rethinking innovative leadership not as a slogan, but as a measurable and theoretically meaningful phenomenon. ([ScienceDirect](#))

This paper develops that agenda in a systematic way. First, it clarifies the conceptual foundations of innovative leadership and distinguishes it from adjacent constructs. Second, it discusses the dimensions of innovative leadership and explains why each dimension matters in organizational settings. Third, it examines how innovative leadership should be measured and validated according to established psychometric principles. Finally, it reflects on the practical implications for organizations, including contexts marked by bureaucracy, public accountability, and digital transformation. The underlying argument is that innovative leadership is neither a purely individual disposition nor a generic management style; it is a multilevel organizational capability that must be conceptualized carefully and

measured responsibly if it is to guide sound theory and practice.

([ScienceDirect](#))

## **2. Conceptual Foundations of Innovative Leadership**

A useful starting point is the distinction between creativity and innovation. Creativity generally refers to the generation of ideas that are both novel and useful, whereas innovation refers to the successful implementation of those ideas in practice. This distinction matters because leadership for innovation must span both worlds: the fluid world of exploration, imagination, and problem reframing, and the disciplined world of selection, coordination, implementation, and scaling. A leader may encourage imagination without building execution systems, or may run an efficient organization that never produces genuinely new possibilities. Innovative leadership must therefore bridge exploration and execution.

([ScienceDirect](#))

This bridging function explains why innovative leadership should not be reduced to personal originality. A creative individual is not automatically an innovative leader. In organizations, ideas become innovations only when they survive resource competition, political scrutiny, risk assessment, and operational integration. For that reason, innovative leadership includes cognitive elements such as reframing problems, motivational elements such as persistence under uncertainty, relational elements such as tolerating dissent, and structural elements such as creating mechanisms that channel ideas toward implementation. Basadur's work on creative leadership already anticipated this broader view by emphasizing that leaders must help others think innovatively together rather than merely generate ideas themselves. Carmeli, Gelbard, and Gefen likewise linked innovation leadership to strategic fit and performance, showing that the leadership problem is ultimately organizational and systemic, not merely personal. ([ScienceDirect](#))

Recent construct-development work gives this broader conception sharper form. Zhu, Yang, Yang, and Sosik define innovative leadership through five dimensions: thinking creatively, holding the willpower to be innovative, tolerating different opinions and various risks, establishing mechanisms for innovation, and implementing innovation ideas. This model is significant because it integrates internal and external aspects of leadership. It captures what innovative leaders think, what they are willing to endure, how they relate to disagreement and risk, what structures they build, and how they move ideas into practice. In this sense, innovative leadership is best understood as an integrative construct connecting cognition, motivation, relationship management, institutional design, and execution.

([ScienceDirect](#))

### **3. Innovative Leadership and Adjacent Leadership Constructs**

Innovative leadership overlaps with, but is not identical to, transformational leadership. Transformational leaders inspire followers, articulate vision, and mobilize commitment to change. A substantial body of research shows that transformational leadership is positively associated with innovation, creativity, and innovative work behavior across sectors and countries. Yet transformational leadership is broader than innovation and may generate emotional energy without specifying the concrete mechanisms by which ideas are surfaced, tested, and implemented. Its innovation effects are real, but they do not exhaust the content of innovative leadership as a dedicated construct. ([ResearchGate](#))

Innovative leadership also intersects with inclusive leadership. Inclusive leaders foster openness, accessibility, and participation; these qualities matter because employees are unlikely to express unconventional ideas where status barriers or interpersonal penalties are high. Javed and colleagues showed that inclusive leadership is positively related to innovative work behavior and that psychological empowerment partly mediates this relationship. This finding suggests that leadership for

innovation requires more than vision: it requires a social climate in which followers feel permitted and able to contribute. Still, inclusion alone does not fully define innovative leadership, because a leader may be inclusive without building systems for prioritizing, piloting, and institutionalizing ideas. ([Cambridge University Press & Assessment](#))

A third adjacent construct is ambidextrous leadership. Rosing, Frese, and Bausch argued that leadership for innovation involves switching between opening behaviors that encourage exploration and closing behaviors that support exploitation and disciplined execution. This insight is highly compatible with the logic of innovative leadership. Indeed, one reason the leadership–innovation relationship has appeared heterogeneous in prior studies is that innovation requires different leader behaviors at different stages. Idea generation demands latitude; implementation demands structure. Innovative leadership thus benefits from ambidextrous flexibility, but it adds to that framework a more explicit focus on personal will, dissent tolerance, and innovation-specific mechanisms. ([ScienceDirect](#))

Finally, innovative leadership may coexist with authentic leadership, especially in settings where trust deficits or bureaucratic inertia impede change. Recent evidence from Indonesian state-owned enterprises suggests that authentic leadership can facilitate innovation through psychological empowerment, even within bureaucratic structures. This is an especially important reminder for emerging economies and public or quasi-public organizations: innovative leadership is not relevant only in start-ups or Silicon Valley contexts. It also matters in institutions where legacy routines, formal procedures, and public accountability create friction against experimentation. In such contexts, innovation leadership involves building credibility and empowerment without losing organizational coherence. ([ScienceDirect](#))

## **4. Dimensions of Innovative Leadership**

### **4.1 Thinking Creatively**

The first dimension, thinking creatively, concerns the leader's capacity to perceive problems differently, challenge cognitive routines, connect distant ideas, and reframe constraints as design opportunities. In practice, this means the leader does not merely ask, "How do we do this better?" but also, "Are we solving the right problem?" Such reframing is especially important in turbulent environments where inherited categories are no longer adequate. Creative thinking at the leadership level helps organizations escape premature closure, recognize latent opportunities, and build alternative futures rather than simply optimize current procedures. Zhu and colleagues identified this as a central element of innovative leadership, while Basadur's earlier work similarly emphasized the leader's role in orchestrating collective creative problem solving.

([ScienceDirect](#))

A simple narrative illustrates the point. Imagine a university facing declining student engagement in large lecture courses. A non-innovative leader might focus only on better timetabling or stricter attendance rules. An innovative leader, by contrast, may reframe the issue from "student discipline" to "learning design," then convene faculty, students, and instructional designers to rethink assessment, hybrid participation, and feedback loops. The leader's innovation lies not in having all the answers, but in reframing the system so that better answers can emerge. That is why thinking creatively is not ornamental; it is epistemic leadership. It determines whether the organization keeps asking obsolete questions or begins to learn anew. This interpretation aligns with the recent view that innovation leadership is partly about enabling strategic fit between the organization and its environment. ([ScienceDirect](#))

## **4.2 Holding the Willpower to Be Innovative**

The second dimension is willpower to be innovative. This refers to perseverance, intentionality, and sustained commitment in the face of ambiguity, delay, resistance, and partial failure. Organizations often

celebrate ideation workshops, but real innovation is emotionally and politically expensive. New initiatives compete with established priorities, challenge entrenched interests, and produce uncertain short-term returns. Leaders who lack persistence may appear creative at the beginning of a process but abandon innovation when difficulties arise. Willpower matters because innovation is rarely linear; it requires repeated attempts, coalition building, and a tolerance for incomplete information. ([ScienceDirect](#))

This dimension is also moral in character. A leader's willpower signals to followers whether innovation is truly valued or only ceremonially endorsed. When employees see a leader defend a pilot project after early setbacks, negotiate resources for a cross-functional team, or protect a dissenting idea from premature dismissal, they infer that experimentation is organizationally legitimate. Conversely, when leaders retreat at the first sign of uncertainty, employees learn that rhetoric about innovation is unsafe to take literally. In this way, willpower becomes part of organizational meaning-making. It transforms innovation from an episodic campaign into a credible strategic commitment. Research linking leadership and organizational innovation repeatedly suggests that leader persistence and support are central to whether creative efforts survive long enough to become institutional outcomes. ([ScienceDirect](#))

### **4.3 Tolerating Different Opinions and Various Risks**

The third dimension concerns tolerance for difference and risk. Innovation almost always begins as deviance from the expected. New ideas are inconvenient because they unsettle settled assumptions, redistribute attention, and expose the organization to uncertainty. A leader who reacts defensively to disagreement may preserve harmony at the cost of innovation. By contrast, an innovative leader recognizes that dissent, minority views, and disciplined risk-taking are not organizational pathologies but conditions of adaptive learning. Zhu and colleagues

explicitly include tolerance for different opinions and various risks as a core dimension of innovative leadership. ([ScienceDirect](#))

Psychological safety is especially relevant here. Edmondson defined it as a shared belief that the team is safe for interpersonal risk taking, and her research showed its importance for learning behavior in work teams. In innovation contexts, this means employees must feel that they can voice unusual ideas, report failures, ask naïve questions, and challenge prevailing assumptions without humiliation or punishment. Inclusive leadership research reinforces this point by showing that supportive, accessible leadership enhances innovative work behavior partly through psychological empowerment. Thus, innovative leadership does not eliminate risk; rather, it governs the social meaning of risk so that experimentation becomes discussable and manageable instead of silently suppressed. ([Sage Journals](#))

A practical illustration can be seen in public or regulated organizations. A hospital, public agency, or state-owned enterprise cannot tolerate reckless experimentation, but it still requires innovation in service delivery, coordination, and digitalization. Here the innovative leader's task is to distinguish intelligent risk from irresponsible risk. The point is not to romanticize disruption, but to create forums where alternative ideas can be examined, prototyped, and assessed before scale-up. This balance is increasingly important in public organizations, where innovative work behavior depends on a combination of personal, inter-team, and organizational factors rather than on individual heroics alone. ([ScienceDirect](#))

#### **4.4 Establishing Mechanisms for Innovation**

The fourth dimension, establishing mechanisms for innovation, is often what separates inspirational language from actual organizational capability. Leaders do not produce innovation only through speeches or symbolic acts. They also shape routines, incentives, channels, evaluation criteria, and governance processes. Mechanisms may include idea platforms, structured

after-action reviews, cross-functional innovation councils, protected experimentation budgets, rapid prototyping routines, or clear criteria for pilot selection and post-pilot scaling. In short, innovative leadership must become institutional architecture. Zhu and colleagues give this dimension particular significance, and Carmeli et al. similarly show that innovation leadership contributes to strategic fit and performance by helping organizations adapt to their environments through more than mere exhortation. ([ScienceDirect](#))

This dimension is especially valuable because organizations often confuse willingness with capability. Many organizations say they want innovation, yet their budgeting cycles punish experimentation, their performance systems reward short-term efficiency only, and their reporting lines slow cross-unit collaboration. In such environments, employees may have ideas but no viable pathway for movement from concept to trial. Innovative leaders therefore ask organizational questions: Where do ideas go? Who evaluates them? How quickly? With what criteria? What happens after failure? These questions convert innovation from aspiration into process. They also make leadership observable and therefore measurable, which is critical for valid assessment. Measurement that ignores institutional mechanisms risks misidentifying charismatic enthusiasm as innovation leadership. ([ScienceDirect](#))

#### **4.5 Implementing Innovation Ideas**

The fifth dimension is implementation. Innovation that remains permanently in brainstorming mode is not innovation in the organizational sense. Implementation requires sequencing, coordination, political skill, and operational discipline. Leaders must align stakeholders, secure resources, monitor progress, and make judgments about scaling, adaptation, or termination. The implementation dimension is therefore the practical test of innovative leadership. It demonstrates whether the leader can translate promising novelty into usable outcomes under real

organizational constraints. Zhu et al.'s model appropriately ends with implementing innovation ideas, and the OECD definition of innovation reinforces why implementation is non-negotiable: novelty becomes innovation only when brought into use or introduced to users.

([ScienceDirect](#))

Implementation also reveals the temporal complexity of innovative leadership. Early-stage innovation privileges openness, curiosity, and divergence; later-stage innovation requires choice, closure, and discipline. This is why ambidextrous leadership remains an important comparative lens. Leaders must know when to widen the funnel and when to narrow it, when to protect experimentation and when to insist on operational accountability. The implementation dimension thus prevents the concept of innovative leadership from collapsing into a romantic image of permanent brainstorming. It affirms that innovation is valuable precisely because it changes products, processes, services, or organizational practices in a consequential way. ([ScienceDirect](#))

## **5. Measuring Innovative Leadership**

The measurement of innovative leadership matters for both theory and practice. Without measurement, organizations rely on anecdote and impression; with poor measurement, they risk confusing popularity, charisma, or general positivity with innovation-specific leadership. For research, measurement enables cumulative knowledge, comparison across samples, and theory refinement. For practice, it informs leader development, succession decisions, culture diagnosis, and innovation interventions. Yet measurement must begin with conceptual precision. Lambert and Newman emphasize that sound construct development proceeds through three basic steps: defining the construct, choosing operationalizations that match the definition, and gathering empirical evidence to confirm construct validity. This sequence is particularly relevant

to innovative leadership because the construct has historically been underdefined and frequently conflated with related styles. ([Sage Journals](#))

A central distinction is between measuring innovative leadership and measuring innovative work behavior. The latter focuses on what employees do: generating, promoting, and implementing ideas in their work roles. Seminal work by De Jong and Den Hartog developed a measure of innovative work behaviour, and subsequent validation studies, such as Dahiya and Raghuvanshi's work in the Indian apparel manufacturing sector, examined the dimensionality and validity of IWB measures in specific contexts. These tools are valuable, but they are not measures of leadership itself. They capture downstream employee behavior, not the leader characteristics and actions that make such behavior more or less likely. This distinction is crucial because a valid theory of innovative leadership must not simply infer the construct from its outcomes. ([Wiley Online Library](#))

Leadership-specific measures are therefore indispensable. Earlier efforts, such as Khalili's measure of creative and innovative leadership, helped establish that innovation-related leadership behaviors could be operationalized as distinct constructs. More recently, Zhu et al. advanced this line of work by developing the Innovative Leadership Measure through a multi-study process using interviews, open-ended responses, archival input, literature review, and psychometric testing. Their article explicitly states that seven studies were used to establish the reliability and validity of the measure and that the resulting scale predicted workplace innovative performance at both individual and team levels beyond other relevant leadership styles. This is a major step because it shifts the field from proxy-based inference to direct construct assessment. ([IDEAS/RePEc](#))

From a methodological standpoint, the logic of scale development in this area follows a familiar but demanding sequence. Hinkin's classic guidance on developing survey measures remains foundational, stressing the importance of item generation, factor analytic scrutiny, and reliability

assessment. Contemporary organizational-methods guidance echoes this sequence while sharpening the need for stronger construct definition and validation evidence. In other words, innovative leadership should not be measured by collecting a few face-valid items such as “my leader supports new ideas.” Such items may capture a sliver of the construct, but not its full dimensionality. A valid scale must sample the content domain broadly enough to reflect cognition, motivation, tolerance for difference and risk, mechanism building, and implementation behavior. ([ScienceDirect](#))

## **6. Validation of Innovative Leadership Measures**

Validation is not a one-time stamp of approval but an ongoing argument that the intended interpretation of a score is justified. The modern testing tradition associated with the *Standards for Educational and Psychological Testing* emphasizes that validity evidence may come from test content, internal structure, and relationships with other variables, among other sources. Applied to innovative leadership, this means that researchers must ask several questions at once: Do the items adequately represent the construct domain? Do the empirical factor patterns match the theorized dimensions? Do scores relate to theoretically adjacent constructs in appropriate ways while remaining distinct from them? And do they predict relevant outcomes such as innovative behavior, innovation performance, or adaptation capacity? ([Standards for Educational Testing](#))

Content validity is the first requirement. If a scale claims to measure innovative leadership but contains only items about encouragement, it risks collapsing into supportive leadership. If it includes only items about vision, it risks becoming transformational leadership under another name. Content validation therefore requires careful sampling across the construct’s domain. The five-dimensional model offered by Zhu et al. is especially helpful because it identifies a sufficiently rich content universe. Qualitative item generation through interviews and open-ended responses

further strengthens content validity by grounding the measure in organizational reality rather than abstract theorizing alone. ([ScienceDirect](#))

Internal-structure evidence is the next layer. Here researchers typically examine whether items load on the expected factors and whether alternative factor models fit the data less well. In adjacent literatures, validation studies of innovative work behavior have tested competing factorial structures rather than assuming dimensionality a priori. Similarly, recent psychometric work in organizational science emphasizes that internal structure is not just a statistical exercise but a test of whether operationalization actually corresponds to conceptual definition. For innovative leadership, this implies that a one-factor solution may be too crude if the construct is genuinely multidimensional, while an overfragmented model may sacrifice parsimony and usability. The goal is not complexity for its own sake, but faithful representation of the construct. ([ScienceDirect](#))

Convergent and discriminant validity are equally important. Innovative leadership should correlate positively with transformational, inclusive, and authentic leadership because these constructs share prosocial and change-oriented content. At the same time, correlations should not be so high that innovative leadership becomes indistinguishable from them. The value of a new construct lies partly in what it adds beyond existing explanations. Zhu et al. explicitly report that their measure predicted innovation-related outcomes beyond relevant leadership styles, which is evidence of incremental validity. This is especially significant in a crowded leadership field where new labels are often criticized as conceptual relabeling. Innovative leadership earns its place as a distinct construct only if it captures unique variance in innovation outcomes that neighboring constructs do not fully explain. ([ScienceDirect](#))

Criterion-related validity connects the measure to consequential outcomes. Here the evidence is already promising. Studies across the broader

literature show that leadership is positively related to innovation, innovative work behavior, and performance, while meta-analytic evidence suggests that innovation itself is positively associated with organizational performance. Research also shows that transformational leadership predicts innovation across national settings, though the magnitude may vary by cultural context such as uncertainty avoidance. This means that a valid innovative leadership measure should relate not only to proximal outcomes like psychological empowerment and idea sharing, but also to distal outcomes such as team innovation, adaptability, service improvement, and firm performance. Validation is strongest when these relationships are theoretically coherent and empirically replicable.

([Springer](#))

A further requirement is measurement invariance. If innovative leadership is to be compared across gender groups, industries, hierarchical levels, or national cultures, researchers must test whether the scale functions similarly across those groups. Recent psychometric research in related domains demonstrates the use of multi-group confirmatory factor analysis to establish configural, metric, scalar, and residual invariance. Without such checks, observed differences may reflect measurement artifacts rather than real differences in innovative leadership. This issue is especially salient in cross-cultural research because tolerance for dissent, perceptions of risk, and expectations of leader authority vary substantially across societies. A leadership scale developed in one context cannot simply be assumed to carry the same meaning elsewhere. ([Frontiers](#))

## **7. Methodological and Substantive Challenges**

Despite recent advances, several challenges remain. The first is common-method bias. Many leadership studies rely on cross-sectional employee self-reports collected at one point in time, making it difficult to separate substantive relationships from shared method variance. Hughes and colleagues criticized this tendency in the leadership–creativity literature,

noting the prevalence of cross-sectional designs and encouraging more rigorous approaches. For innovative leadership, stronger designs would include multisource ratings, time-lagged data, supervisor–follower pairings, team-level aggregation where justified, and objective or archival indicators of innovation outcomes where possible. ([ScienceDirect](#))

The second challenge is level of analysis. Innovation may be studied at individual, team, organizational, or interorganizational levels, but leadership mechanisms differ across these levels. A front-line supervisor may directly influence employee innovative work behavior through coaching, inclusion, and empowerment. A top management team, by contrast, may influence innovation by shaping strategic priorities, structures, and investment logic. Zhu et al. are notable for demonstrating relations to innovative performance at both individual and team levels, but more work is needed to clarify how the same construct manifests differently across organizational strata. Multilevel theorizing is not optional here; it is built into the nature of the phenomenon. ([ScienceDirect](#))

A third challenge concerns contextual diversity. Public organizations, universities, hospitals, family firms, digital platforms, and state-owned enterprises face different innovation demands and constraints. In public organizations, systematic review evidence suggests that innovative work behavior is shaped by personal, inter-team, and organizational factors, while recent Indonesian evidence shows that even bureaucratic SOEs can become more innovative when authentic leadership and empowerment are present. The implication is that innovative leadership should not be operationalized as if it were identical across all settings. The construct may remain stable at a conceptual level, but its behavioral expression and salience likely vary with task uncertainty, regulation, professional norms, and institutional structure. ([ScienceDirect](#))

There is also a normative challenge. Innovation is often celebrated as inherently good, yet not every innovation is ethically desirable or

strategically sound. Leaders may overvalue novelty, neglect implementation capacity, or pressure employees into constant experimentation that leads to fatigue and fragmentation. A mature concept of innovative leadership must therefore avoid innovation romanticism. The leader's role is not to maximize novelty at any cost, but to govern the innovation process responsibly—balancing exploration with coherence, empowerment with accountability, and risk-taking with ethical and operational judgment. This is one reason careful measurement matters: it helps separate disciplined innovation leadership from the mere performance of modernity. ([ScienceDirect](#))

## **8. Implications for Organizations and Leadership Development**

For practice, the most important implication is that organizations should stop treating innovation leadership as a vague cultural aspiration and start treating it as a diagnosable capability. Leadership development programs often emphasize communication, vision, and motivation, but neglect the innovation-specific competencies discussed in this paper: reframing problems, protecting dissent, structuring experimentation, and carrying ideas through implementation. A useful development architecture would therefore combine assessment, coaching, and organizational redesign. A leader might score highly on creative thinking but weakly on implementation discipline; another might build robust mechanisms but suppress dissent. Measurement makes these distinctions visible and actionable. ([ScienceDirect](#))

Organizations should also resist the temptation to measure only downstream innovation outcomes. A firm may have low innovation output because of market conditions, regulation, legacy systems, or resource scarcity rather than weak leadership alone. Conversely, a firm may temporarily enjoy innovation success because of a favorable technological cycle even when leadership processes are fragile. Measuring innovative leadership directly allows a more developmental conversation. It helps

organizations identify whether the problem lies in cognition, persistence, risk culture, institutional mechanisms, or implementation capability. In that sense, a good innovative leadership measure functions not merely as a research instrument but as a strategic mirror. ([ScienceDirect](#))

This is particularly relevant in emerging-economy contexts such as Indonesia, where organizations often navigate simultaneous pressures of digital transformation, bureaucratic procedure, public legitimacy, and capability upgrading. The Indonesian SOE evidence is instructive because it suggests that innovation in such contexts is not simply a matter of importing agile jargon or digital tools. It requires leaders who are credible, empowering, and willing to reshape bureaucratic energy toward experimentation without abandoning accountability. In similar settings—public universities, regional hospitals, local government agencies, and large family businesses—innovative leadership may be one of the few constructs capable of integrating human, structural, and strategic aspects of change into a single developmental framework. ([ScienceDirect](#))

## **9. Conclusion**

Innovative leadership has emerged as an important construct because organizations increasingly need leaders who can do more than motivate compliance or preserve efficiency. They need leaders who can think differently, endure uncertainty, welcome difference, build mechanisms for experimentation, and bring promising ideas into use. Recent research has advanced the field by conceptualizing innovative leadership as a distinct multidimensional construct and by developing a dedicated measure with promising evidence of reliability and validity. This marks a significant move away from proxy-based reasoning toward more direct and rigorous assessment. ([ScienceDirect](#))

At the same time, the concept will remain useful only if scholars and practitioners continue to treat measurement as an evidentiary enterprise rather than a branding exercise. Innovative leadership should be defined

clearly, operationalized comprehensively, and validated across levels, sectors, and cultures. When that discipline is maintained, the construct offers real value. It helps explain why some organizations convert ideas into sustained innovation while others remain trapped between rhetoric and routine. In an era defined by uncertainty, digital acceleration, and institutional complexity, innovative leadership is best understood as the disciplined orchestration of novelty into credible organizational change. ([Standards for Educational Testing](#))

## Glossary

**Ambidextrous leadership:** A leadership approach that alternates between opening behaviors that stimulate exploration and closing behaviors that support disciplined execution during the innovation process. ([ScienceDirect](#))

**Construct validity:** The overall degree to which evidence supports the interpretation of scores as representing the intended construct. Contemporary organizational methods emphasize construct definition, matching operationalization, and empirical validity evidence. ([Sage Journals](#))

**Creative thinking:** The capacity to reframe problems, combine disparate ideas, and generate novel and useful approaches to organizational challenges. In innovative leadership, it is one of the core dimensions. ([ScienceDirect](#))

**Criterion-related validity:** Evidence that a measure is meaningfully related to relevant outcomes, such as innovative performance, innovative work behavior, or organizational adaptation. ([ScienceDirect](#))

**Innovative leadership:** A multidimensional leadership construct involving creative thinking, willpower for innovation, tolerance of different opinions and risks, establishment of innovation mechanisms, and implementation of innovation ideas. ([ScienceDirect](#))

**Innovative work behavior (IWB):** Employee behavior involving the generation, promotion, and implementation of new ideas within a work role, group, or organization. ([Wiley Online Library](#))

**Innovation:** A new or improved product or process that differs significantly from prior practice and has been implemented, introduced, or brought into use. ([OECD](#))

**Measurement invariance:** Evidence that a scale functions comparably across groups, allowing meaningful comparison across gender, culture, sector, or organizational level. ([Frontiers](#))

**Psychological safety:** A shared belief that a team is safe for interpersonal risk taking, making it easier for members to speak up, ask questions, and experiment. ([Sage Journals](#))

**Psychometric development:** The systematic process of defining a construct, generating items, evaluating factor structure, assessing reliability, and gathering multiple forms of validity evidence. ([Sage Journals](#))

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