A Decision-Theoretic Framework of Strategic Consensus Formation: The Moderating Role of TMT Diversity Under Uncertainty

Tom Wei-Hui Yeh

College of Management, I-Shou University, Taiwan; tom.w.h.yeh@gmail.com

Correspondence: tom.w.h.yeh@gmail.com

DOI: https://doi.org/10.30210/JMSO.202503.013

Submitted: Jun. 02, 2025 Accepted: Jul. 15, 2025

ABSTRACT

This conceptual paper presents a dynamic, decision-theoretic framework for understanding how strategic consensus forms within Top Management Teams (TMTs) under conditions of uncertainty. The model treats consensus as an emergent outcome of iterative belief updating and boundedly rational judgment, moderated by the cognitive diversity of team members. Drawing on principles from decision theory, organizational behavior, and cognitive science, the framework conceptualizes TMT diversity not as inherently beneficial or detrimental, but as a contingent force whose effects depend on environmental complexity and internal team processes such as communication quality and psychological safety. The model advances existing literature by moving beyond static treatments of consensus and integrating probabilistic, process-based mechanisms into the study of executive decision-making. In doing so, it provides a theoretical foundation for designing interventions—such as structured dialogue, iterative planning, and trust-building initiatives—to enhance strategic alignment in diverse and uncertain contexts.

Keywords: Strategic Consensus, Decision Theory, TMT Diversity, Uncertainty, Organizational Cognition, Information Updating

1. Introduction

Strategic consensus within top management teams (TMTs) is widely regarded as a cornerstone of effective strategy formulation and execution. When executives align on key priorities, resource allocation becomes more coherent, implementation smoother, and performance outcomes more consistent. However, in today's volatile environments—characterized by ambiguous data, shifting markets, and competing interpretations—achieving such alignment is increasingly difficult [1, 2]. The challenge becomes more pronounced in diverse TMTs, where members bring heterogeneous experiences, cognitive styles, and interpretive frames [3].

Prior research has established the importance of strategic consensus but often treats it as a binary or static outcome—either present or absent at a given point in time [4, 5]. This approach overlooks the dynamic and iterative nature of how consensus actually develops, fluctuates, or breaks down over time. Moreover, while bounded rationality and decision-making limitations have been acknowledged

in executive behavior [6, 7], their interaction with TMT diversity and uncertainty remains under-theorized in consensus research. As a result, there is a need for frameworks that capture the processual, probabilistic, and context-sensitive nature of strategic agreement formation.

Recent reviews [8, 9] call for greater attention to the mechanisms by which TMT consensus emerges and evolves, particularly under conditions of environmental complexity. Yet few models integrate decision-theoretic principles—such as belief updating and information asymmetry—with the social dynamics of diverse executive teams.

This paper responds to that gap by introducing a decision-theoretic framework that models strategic consensus as an emergent, dynamic process of iterative belief updating and bounded rational judgment. The model positions TMT diversity as a moderator whose effects are conditioned by environmental uncertainty and internal team processes such as psychological safety and communication quality. By moving beyond static models and emphasizing probabilistic convergence, this framework advances theoretical understanding and provides a foundation for future empirical research and practical intervention design.

Overall, this section presents the core logic of the decision-theoretic framework by articulating seven foundational assumptions. These assumptions are organized into three interrelated domains: (1) individual cognition, which captures bounded rationality and heterogeneity of beliefs [10]; (2) social interaction, which accounts for belief updating, communication, and cognitive distance [11]; and (3) contextual factors, including environmental uncertainty and its interpretive impact [12, 13]. Together, these elements explain how strategic consensus emerges as a probabilistic and dynamic outcome of top management decision processes under complexity.

2. Theoretical Background

2.1 Strategic Consensus in Organizations

Strategic consensus refers to the shared understanding and alignment among top executives regarding an organization's goals, priorities, and direction [1]. Such alignment supports coordinated action, efficient resource deployment, and smoother implementation of strategic initiatives. However, consensus is not a binary state but an emergent process—particularly under uncertainty, where information is incomplete, ambiguous, or contested [5]. Understanding how consensus is formed, delayed, or disrupted requires attention to the micro-level dynamics of executive cognition and team interaction [14, 15].

2.2 Bounded Rationality and Iterative Judgment

Bounded rationality, as originally articulated by Simon [6], recognizes that decision-makers operate under conditions of limited information, finite processing capacity, and time constraints. Rather than fully optimizing, managers satisfice—relying on heuristics, prior experiences, and mental shortcuts. In diverse TMTs, these limitations become more pronounced. Executives interpret the same information through divergent cognitive filters shaped by their functional backgrounds, industry experiences, and values [7, 1]. As a result, bounded rationality amplifies interpretive differences, making it harder to achieve shared understanding or coordinate effectively—especially when

uncertainty further complicates sensemaking.

For example, one TMT member from a marketing background may view declining sales as a branding issue, while another with a finance background may interpret it as a pricing failure. These divergent inferences stem not from data inconsistency but from cognitively bounded frames that limit cross-perspective integration—ultimately slowing or fragmenting consensus formation.

2.3 TMT Diversity as A Moderator

Diversity in TMTs introduces variation in experiences, perspectives, and cognitive styles. Functional diversity enhances innovation by incorporating knowledge from multiple domains [16]. Cognitive diversity introduces non-redundant interpretations of strategic issues. However, this diversity can also hinder consensus formation by increasing the range of conflicting viewpoints and complicating communication [1, 17].

The effect of TMT diversity on strategic consensus is conditional. In low uncertainty environments, diversity may lead to overanalysis and inefficiency. In high uncertainty environments, it may generate broader scenario planning but delay convergence [2]. Hence, TMT diversity moderates both the pace and quality of consensus formation depending on contextual factors.

3. The Decision-Theoretic Model

The conceptual model proposed in this paper rests on a series of foundational assumptions that bridge decision theory and organizational behavior. These assumptions define how individual top executives process information, interact with one another, and collectively form strategic consensus under conditions of uncertainty. The assumptions are both behavioral and structural in nature, and together they underpin the logic behind the proposed propositions [6, 7].

A1. Bounded Rationality of TMT Members

Top management team members are not fully rational agents. Instead, they are boundedly rational decision-makers who operate under cognitive limitations, time constraints, and imperfect information [6]. Rather than optimizing across all available strategic options, they satisfice—seeking "good enough" solutions based on heuristic judgments, past experiences, and cognitive shortcuts. This means their judgments are inherently subjective and prone to bias, especially under uncertain or ambiguous conditions. Each executive's prior beliefs, values, and expertise shape how they perceive and interpret strategic problems. Consensus is not achieved through perfect information aggregation but through subjective belief updating [18], which makes the process of alignment incremental and potentially fragile.

A2. Heterogeneity of Prior Beliefs

At the outset of any strategic decision-making process, TMT members do not begin with identical assumptions or expectations. Their prior beliefs—formed through differences in training, functional experience, industry exposure, and cognitive style—result in initial disagreement or divergence [7, 1]. In this model, prior beliefs serve as the starting points for Bayesian updating. Greater cognitive heterogeneity (i.e., diversity) widens the dispersion of these priors, thereby requiring more communication and deliberation to reach convergence. Overall, cognitive diversity

introduces informational richness but also increases the distance that must be traversed for consensus to emerge [19, 20].

A3. Environmental Uncertainty as Decision Noise

Strategic decision environments are modeled as inherently uncertain, meaning that the information available to executives is incomplete, noisy, and subject to interpretation [2, 16]. Uncertainty increases the ambiguity of external signals and reduces the clarity of cause-effect relationships. This "noise" interferes with rational inference and amplifies the role of interpretation, intuition, and framing in decision-making. Under high uncertainty, it is less clear which data are reliable, which options are feasible, or which risks are most salient. In uncertain environments, the same piece of information can support multiple, equally plausible interpretations depending on one's cognitive frame—thus complicating consensus.

A4. Iterative Belief Updating and Social Calibration

The consensus formation process is not instantaneous; it unfolds over multiple rounds of interaction. Each TMT member forms an initial judgment based on prior beliefs and available information, then engages in social interaction (e.g., discussion, debate, dissent, negotiation) that exposes them to others' perspectives. This social process prompts belief updating—a form of bounded Bayesian inference whereby individuals revise their own views in light of new, socially mediated information [5]. Consensus is emergent and dynamic. It is not the result of a one-time deliberation but a recursive process of belief adjustment and interpersonal calibration.

A5. TMT Diversity as Cognitive Distance

Diversity is modeled not simply as demographic difference but as cognitive distance between TMT members. In this model, cognitive distance refers to the degree of difference between TMT members in how they perceive, interpret, and evaluate strategic information. It is not merely a function of demographic attributes but a measure of variation in cognitive frameworks—how individuals categorize problems, assign causality, and prioritize objectives. This construct builds on research in cognitive psychology and organizational behavior, which suggests that differences in education, functional expertise, and professional experience can lead to divergent mental models [1, 17]. For analytical purposes, cognitive distance can be conceptualized as the variance across belief distributions held by team members, affecting the effort and time required to achieve mutual understanding.

This distance reflects differences in how team members categorize problems, prioritize goals, or interpret causal relationships. Functional, educational, or experiential diversity is assumed to manifest in this cognitive space [1, 17]. Greater diversity increases the likelihood that individuals will "speak past" each other or misinterpret each other's reasoning unless shared mental models are cultivated. The impact of diversity is not linear. Moderate cognitive distance may foster richer deliberation, while extreme cognitive distance can cause breakdowns in mutual understanding.

A6. Consensus as Probabilistic Convergence

Strategic consensus is conceptualized as a form of probabilistic convergence, where team members' belief distributions over strategic alternatives gradually align [4]. That is, strategic

consensus is modeled here as a process of probabilistic convergence—a gradual alignment of belief distributions over potential strategic alternatives. Rather than viewing consensus as a binary state (achieved or not), we conceptualize it as a matter of degree, where beliefs become increasingly similar in both central tendency and variance over time. This aligns with Bayesian principles of belief updating: each interaction and piece of information nudges the probability weights that team members assign to different options. Convergence is thus a dynamic and partial process that may evolve, regress, or plateau depending on group dynamics and contextual conditions.

Unlike models that treat consensus as a binary variable (achieved or not), this model defines consensus as a matter of degree: how close members' beliefs come over time in terms of variance and central tendency. This allows for partial or evolving consensus to be analytically meaningful. Consensus is a fluid outcome rather than a fixed state. It can increase or deteriorate over time depending on new data, interpretive shifts, and interpersonal dynamics.

A7. Communication Quality as an Enabling Mechanism

The effectiveness of belief updating and consensus formation depends heavily on the quality of intra-team communication [21]. The quality of intra-team communication is a crucial enabling condition for belief updating and consensus formation. Communication quality encompasses both structural elements—such as frequency of interaction, use of rich communication media, and transparency of information—and psychological elements, including trust, openness, and mutual respect [21]. In cognitively diverse teams, structured communication practices can significantly mitigate the challenges of interpretive misalignment.

For example, structured debate formats (e.g., "red team vs. blue team" exercises) can help surface hidden assumptions and expose blind spots. Feedback mechanisms, such as real-time polling or anonymous commentary, allow minority voices to be heard without fear of reprisal. Psychological framing techniques—like explicitly separating idea critique from personal criticism—can foster an environment where dissent is normalized rather than avoided. These mechanisms reduce the social and cognitive friction introduced by diversity, creating shared interpretive space for probabilistic belief convergence.

Communication quality encompasses both the structural (e.g., frequency, transparency, information richness) and psychological (e.g., trust, openness, psychological safety) conditions that support dialogue. When communication quality is high, even cognitively distant individuals can bridge gaps and develop shared frames.

These assumptions form the foundation for the propositions that follow. They establish a realistic model of how consensus forms within diverse executive teams operating under uncertainty. Crucially, they move beyond static characterizations of TMT attributes or organizational context to embrace a processual and interactive view of decision-making.

Collectively, these seven assumptions form a dynamic framework that reconceptualizes strategic consensus as a probabilistic and emergent process. Unlike traditional models that treat consensus as a binary outcome of team composition or leadership alignment, this framework emphasizes recursive interactions, interpretive complexity, and contextual contingency. It reflects the reality that in

cognitively diverse teams operating under uncertainty, consensus is not a fixed endpoint but a continuously negotiated convergence of belief systems. The model also provides a structured basis for generating formal propositions and guiding empirical inquiry into the micro-foundations of strategic alignment in executive teams.

4. Proposition Development

Building upon the model assumptions outlined above, this section develops a series of theoretical propositions that explain the relationship between TMT diversity and strategic consensus formation under varying conditions of environmental uncertainty. These propositions are grounded in principles of bounded rationality, Bayesian updating,

g, and cognitive heterogeneity, and aim to articulate the mechanisms through which TMT dynamics interact with external complexity to shape decision outcomes.

P1: TMT diversity reduces the likelihood of rapid strategic consensus formation under uncertainty.

This proposition reflects the notion that cognitive and experiential diversity among top managers introduces variance in the priors that individuals bring to a decision-making process. When faced with ambiguous or equivocal data, each member's interpretation is conditioned by their functional expertise, industry background, and personal values. As a result, the initial range of beliefs across the TMT is wider in diverse teams than in homogenous ones.

In a decision-theoretic framework, this dispersion in priors leads to a greater "distance to convergence," meaning that more rounds of information updating, discussion, and social calibration are needed to achieve a shared understanding. Under time pressure or in fast-paced environments, this elongation of the decision cycle can delay action and reduce strategic agility.

However, it is not the presence of diversity alone that causes delay—it is the interaction of diversity with the bounded rationality of agents and the inherent noise in uncertain environments that drives this effect. When managers cannot readily agree on what information means or what goals should be prioritized, consensus becomes slower and more fragile.

P2: Under moderate uncertainty, TMT diversity enhances the depth and quality of strategic consensus.

This proposition recognizes that while diversity may initially slow down decision-making, it also increases the comprehensiveness of the information processing that occurs within the TMT—particularly in environments characterized by moderate levels of uncertainty. In such contexts, external information is neither fully reliable nor entirely chaotic; it presents patterns that are discernible but ambiguous enough to require interpretation.

In these situations, diversity serves as a resource. Multiple perspectives help uncover blind spots, generate creative alternatives, and enable a form of collective sensemaking that is superior to any single viewpoint. Through iterative dialogue, the team can explore different causal models, stress-test assumptions, and gradually align around a strategic interpretation that integrates diverse elements.

The key mechanism here is constructive cognitive friction—the healthy clash of ideas that stimulates analytical rigor. If managed effectively, this friction leads to high-quality convergence, where consensus is not only achieved but is also more robust, resilient, and reflective of

environmental complexity.

P3: Under high uncertainty, excessive TMT diversity increases the risk of decision fragmentation.

This proposition addresses the nonlinear nature of the diversity-consensus relationship. When uncertainty exceeds a certain threshold—due to highly dynamic markets, disruptive technologies, or regulatory flux—information signals become increasingly ambiguous and even contradictory. Under these conditions, the cognitive distance created by TMT diversity may become unmanageable.

Rather than promoting integration, excessive diversity under high uncertainty can result in interpretive dissonance, wherein team members not only disagree on conclusions but also fail to agree on the premises and criteria for evaluation. As boundedly rational agents, they may resort to entrenched positions, heuristics, or risk-averse behaviors, creating silos within the executive team. This can lead to decision fragmentation—where different subgroups pursue conflicting strategies or where consensus is forced prematurely, resulting in superficial alignment that lacks true commitment. The net effect is reduced decision quality and weakened implementation follow-through.

P4: Iterative decision cycles moderate the negative effects of TMT diversity on consensus formation.

This proposition introduces the role of temporal process and interaction structure in mitigating the challenges posed by diversity. In decision theory, belief updating is a recursive process: agents revise their judgments based on both new information and social cues from others in the group. When this process is allowed to unfold over multiple rounds—through repeated meetings, scenario planning sessions, or structured dialogues—the variance in beliefs can gradually narrow.

Diverse TMTs benefit disproportionately from such iterative cycles because each round provides an opportunity to surface assumptions, clarify misunderstandings, and realign expectations. The act of revisiting issues under slightly altered frames also encourages perspective-taking, which helps to reduce cognitive distance.

The proposition implies that process design matters. Organizations that institutionalize iterative decision processes (e.g., feedback loops, decision audits, strategic reviews) create a space for diversity to manifest constructively rather than destructively.

P5: Psychological safety strengthens the positive influence of TMT diversity on consensus quality.

This final proposition integrates a social-psychological moderator into the decision-theoretic model. Psychological safety—the shared belief that the team is safe for interpersonal risk-taking—creates an environment where team members feel comfortable expressing dissenting views, challenging assumptions, and admitting uncertainty.

In diverse teams, psychological safety acts as a social lubricant that enables the open exchange of ideas across cognitive boundaries. It reduces the defensive behaviors that often accompany disagreement and allows minority voices to influence majority opinions. This dynamic is essential for turning diversity into an asset rather than a liability.

Moreover, when psychological safety is high, TMT members are more likely to engage in collaborative sensemaking, leading to convergence that is not coerced but organically negotiated. Thus, psychological safety amplifies the constructive mechanisms of diversity while buffering its potential for conflict and misalignment.

Synthesis of Propositions

Together, these propositions form an integrated logic that models strategic consensus formation as a function of three key interacting elements: the level of environmental uncertainty, the degree of TMT diversity, and the quality of the team's internal decision-making processes. The model proposes a nonlinear relationship between diversity and consensus, shaped by both cognitive and contextual variables. It highlights the importance of processual and interpersonal moderators that can either facilitate or obstruct convergence.

By articulating these propositions, this paper lays the groundwork for future empirical testing and theory refinement. It encourages scholars to move beyond binary assumptions about the effects of diversity and instead explore the contingent, dynamic, and relational nature of strategic decision-making at the top of organizations.

5. Discussion

The conceptual framework developed in this paper offers a nuanced perspective on how strategic consensus forms within Top Management Teams (TMTs) operating in uncertain environments. By integrating decision theory, bounded rationality, and cognitive diversity, the model challenges conventional assumptions in strategic management and organizational behavior [7, 6, 1]. Rather than treating consensus as a binary outcome or a function of simple alignment, this model frames consensus as a dynamic, iterative, and probabilistic process of belief convergence shaped by cognitive, social, and environmental forces [5, 4].

This section reflects on the theoretical contributions of the model, clarifies its scope conditions, explores its boundary conditions, and proposes directions for empirical investigation.

5.1 Reconceptualizing Consensus as a Process

One of the central theoretical advances of this model is the reconceptualization of strategic consensus as a process rather than a static outcome [1]. Traditional models often operationalize consensus as a snapshot of agreement or alignment at a given point in time, neglecting the dynamics of how such alignment is achieved—or undermined—over time.

This model, by contrast, treats consensus as an emergent result of boundedly rational, socially mediated belief updating. The iterative nature of consensus formation—whereby TMT members revise their interpretations based on social cues and environmental changes—mirrors real-world decision-making far more accurately than equilibrium models [5]. This processual view enables researchers and practitioners to analyze not only whether consensus exists but how it develops, fluctuates, or collapses across time and context.

5.2 The Double-Edged Nature of TMT Diversity

The model deepens theoretical understanding of TMT diversity by portraying it as a double-edged moderator rather than a uniformly positive or negative attribute [16, 17]. Diversity introduces cognitive richness and representational variety, which can be essential for interpreting complex and ambiguous strategic environments. At the same time, it creates interpretive asymmetries,

communication challenges, and risks of fragmentation.

This duality addresses long-standing empirical inconsistencies in the diversity literature. Prior studies have alternately found positive, negative, or null effects of TMT diversity on firm performance and decision quality. The current model explains these mixed findings by introducing interaction terms—specifically, the moderating roles of uncertainty, iterative communication, and psychological safety [2, 21].

5.3 Integrating Environmental Uncertainty into Consensus Theory

By explicitly incorporating environmental uncertainty as a contextual variable, the model fills a notable gap in the strategic consensus literature. In real organizational settings, uncertainty is not a background condition but an active force that shapes how decisions are made and how agreement is reached [2]. When uncertainty is high, the stakes of interpretation become magnified, and the consequences of misalignment grow more severe.

This model proposes that uncertainty does not uniformly hinder consensus; its effect depends on how it interacts with diversity and process mechanisms. For example, in moderately uncertain environments, diversity can be leveraged for deeper deliberation, whereas in highly turbulent settings, it may paralyze decision-making [16].

5.4 Process Design as a Strategic Resource

A major implication of the model is that process design—the structure, pacing, and psychological climate of decision-making—is not merely a procedural concern but a strategic resource [21]. Organizations that institutionalize iterative decision cycles, feedback mechanisms, and psychological safety are better positioned to harness the benefits of TMT diversity. These design elements transform diversity from a structural variable into a relational one—shaping how team members interact, understand each other, and construct shared meaning [5].

By highlighting the role of communication quality and temporal structure, the model suggests that strategic outcomes are not solely a function of who is in the room, but how those individuals interact over time. Also, the integration of bounded rationality and psychological safety offers a critical bridge between cognitive and social theories of decision-making. Under bounded rationality, executives rely on heuristics and satisficing behaviors due to cognitive limitations and environmental complexity [6]. However, these limitations do not operate in isolation—they are deeply shaped by the social and emotional context in which decision-making occurs. Psychological safety, as defined by Edmondson [21], moderates how executives respond to ambiguity and dissent: when team members feel safe to express divergent views, challenge assumptions, and share incomplete ideas, the negative consequences of bounded rationality—such as defensive reasoning or premature closure—are mitigated. Thus, psychological safety functions as an enabling condition that enhances the efficacy of iterative belief updating, making the boundedly rational process more open, adaptive, and integrative.

5.5 Scope and Boundary Conditions

While the model offers a robust framework, it is subject to several scope conditions and

limitations. First, it assumes that TMT members are willing and able to engage in dialogue. In reality, power asymmetries, status dynamics, or political agendas may inhibit open communication [7]. Second, the model presumes access to reasonably accurate environmental signals. In highly disrupted or deceptive environments, even iterative updating may converge on flawed interpretations. Third, the model is most applicable to strategic decisions characterized by ambiguity and complexity; it may be less relevant for routine or highly constrained decisions.

Future research can test these boundary conditions empirically, explore contingencies such as organizational culture or digital decision support tools, and investigate the durability of consensus once achieved.

5.6 Pathways for Empirical Research

This model provides a rich agenda for empirical exploration. Researchers could use longitudinal designs to track belief convergence over time within TMTs [1]. Agent-based simulations could test the proposition logic under controlled variations in uncertainty, diversity, and communication quality. Survey-based research could assess how psychological safety and process structure moderate the relationship between TMT diversity and perceived consensus [21].

In addition, comparative case studies across industries or national cultures could explore how consensus formation differs under varying institutional logics. These studies would provide a deeper understanding of the generalizability and cultural embeddedness of the model's assumptions.

6. Conclusion and Implications

This conceptual paper offers a novel, decision-theoretic framework for understanding how strategic consensus forms within top management teams (TMTs) operating under uncertainty. By modeling consensus as an emergent outcome of boundedly rational belief updating, moderated by cognitive diversity and structured communication processes, the paper advances both theoretical and practical understanding of strategic decision-making in complex environments.

6.1 Summary of Key Contributions

The model proposed here contributes to the literature in several distinct ways:

First, it shifts the analytical lens from static outcome models to a dynamic, process-oriented view of consensus formation. Rather than treating consensus as a binary state, it conceptualizes consensus as a probabilistic convergence that unfolds over iterative cycles of belief revision.

Second, it reconceptualizes TMT diversity as a contingent moderator with nonlinear effects. Diversity is not inherently beneficial or detrimental; its effects are shaped by contextual variables such as environmental uncertainty and internal process design. This insight reconciles inconsistent empirical findings in the TMT literature and highlights the need for nuanced theorizing.

Third, the model incorporates environmental uncertainty as a structural moderator, showing that the interpretive demands of the external environment significantly condition how diversity operates within decision-making teams. In doing so, it creates a more realistic, ecologically valid framework for understanding strategic alignment in volatile contexts.

Finally, the model identifies iterative communication and psychological safety as key process

mechanisms through which diversity can be transformed into high-quality strategic consensus. This opens new theoretical pathways for integrating behavioral decision theory, group dynamics, and organizational design.

6.2 Theoretical Implications

The theoretical contributions of this paper span multiple domains:

Upper Echelons Theory Extension: The model deepens upper echelons theory by unpacking the micro-processes through which executive characteristics influence firm outcomes. It highlights the role of interaction dynamics, not just individual traits, in shaping strategic decisions.

Cognitive and Behavioral Integration: By blending Bayesian decision logic with theories of cognitive diversity, the model offers a novel synthesis that enriches our understanding of how teams make decisions under uncertainty. It moves beyond demographic proxies to focus on the cognitive structures that underlie belief formation.

Dynamic Systems Perspective: The emphasis on iterative updating and feedback loops aligns the model with systems theory, emphasizing interdependence, emergence, and path-dependence. This orientation encourages scholars to model decision-making not as discrete events but as evolving processes within complex adaptive systems.

Nonlinear Moderation Frameworks: The model introduces a sophisticated view of moderation, showing how variables like diversity and uncertainty interact in complex, threshold-dependent ways. This supports more granular theorizing and hypothesis development for future empirical research.

6.3 Practical Implications

The decision-theoretic framework offers several actionable insights for leaders, consultants, and organizational designers managing strategic consensus in uncertain environments.

Aligning TMT Composition with Environmental Demands: Organizations should match the degree of TMT diversity to the level of environmental uncertainty they face. In volatile markets or innovation-driven sectors, moderate cognitive diversity can foster creative problem solving and reduce blind spots. However, in highly regulated or stable environments, excessive diversity may introduce unnecessary friction and delay. HR and succession planning practices should consider not only individual competencies but also the cognitive complementarity within the TMT.

Designing Iterative Decision Processes: Rather than relying on one-off strategic retreats or compressed decision cycles, firms should institutionalize iterative processes such as phased scenario planning, strategy reviews, and feedback loops. These structures allow diverse teams to gradually update beliefs and avoid premature consensus. Facilitated dialogues and structured disagreement can be embedded into regular decision routines.

Enhancing Psychological Safety: Building a climate of trust is critical for leveraging diversity. Leaders can foster psychological safety by modeling vulnerability, rewarding dissenting views, and emphasizing learning over blame. Interventions such as leadership coaching, peer debriefings, and inclusive meeting protocols can be instrumental in creating this environment. When team members feel safe, they are more likely to revise their judgments and engage in joint sensemaking.

Training in Social-Cognitive Skills: Executive training should extend beyond analytical

reasoning to include skills in listening, perspective-taking, and conflict facilitation. TMT members who are aware of their own cognitive biases and who can engage constructively across differences are better equipped to operate under bounded rationality.

Strategic Agility Through Adaptive Consensus: Finally, the model suggests that agility is not merely about fast decisions, but about adaptive consensus—the ability of leadership teams to continuously realign as conditions change. Organizations should invest in tracking how consensus evolves over time and build mechanisms to recalibrate when necessary.

For those abovementioned implications, some example application scenerios are provided here. First, in healthcare, where clinical, regulatory, and financial logics often collide, TMTs composed of medical, operational, and administrative leaders can use this model to structure interdisciplinary decision-making during crises (e.g., pandemics or treatment innovations). Second, iIn tech startups, where innovation moves faster than institutional scaffolding, iterative belief updating and psychological safety are especially critical to prevent strategic misfires due to unchallenged founder assumptions or team groupthink.Collectively, these strategies bridge the model's theoretical insights with practical interventions, enabling organizations to manage the complexities of executive decision-making with greater precision and effectiveness.

6.4 Concluding Thought

Strategic decision-making at the top of organizations is increasingly marked by complexity, volatility, and cognitive fragmentation. In this context, understanding how diverse executive teams can achieve meaningful consensus is both a theoretical and practical imperative. This paper responds to that challenge by offering a rich, integrative model grounded in behavioral realism and strategic relevance.

By framing consensus as a process of dynamic cognitive alignment, and by identifying the conditions under which diversity enhances or hinders this process, the model opens the door to new lines of inquiry, design, and practice. It invites researchers and practitioners alike to move beyond simplistic assumptions and to embrace the layered, interactive, and adaptive nature of strategic decision-making.

Acknowledgements

This article received no financial or funding support.

Conflicts of Interest

The authors confirm that there are no conflicts of interest.

References

[1] Knight, D., Pearce, C.L., Smith, K.G., Olian, J.D., Sims, H.P., Smith, K.A. and Flood, P. Top management team diversity, group process, and strategic consensus. Strategic Management Journal, 1999, 20(5), 445–465.

[2] Carpenter, M.A. The role of uncertainty in the relationship between top management team diversity and firm performance. Strategic Management Journal, 2000, 21(4), 421–441.

[3] Ma, R., Lv, W. and Zhao, Y. The impact of TMT experience heterogeneity on enterprise innovation quality: Empirical analysis on Chinese listed companies. Sustainability, 2022, 14(24), 16571.

[4] Camelo, C., Fernández-Alles, M. and Hernández, A.B. Strategic consensus, top management teams, and innovation performance. International Journal of Manpower, 2010, 31(6), 678–695.

[5] Dooley, K.J., Fryxell, G.E. and Judge, W.Q. Belaboring the not-so-obvious: Consensus, commitment, and strategy implementation speed and success. Journal of Management, 2003, 26(6), 1237–1257.

[6] Simon, H.A. Rational decision making in business organizations. The American Economic Review, 1979, 69(4), 493–513.

[7] Finkelstein, S. and Hambrick, D.C. Strategic leadership: Top executives and their effects on organizations. St. Paul, MN: West Publishing, 1996.

[8] Kellermanns, F.W., Walter, J., Lechner, C. and Floyd, S.W. The lack of consensus about strategic consensus: Advancing theory and research. Journal of Management, 2005, 31(5), 719–737.

[9] González-Benito, J., Aguinis, H., Boyd, B.K. and Suárez-González, I. Coming to consensus on strategic consensus: A mediated moderation model of consensus and performance. Journal of Management, 2012, 38(6), 1685–1714.

[10] Pelé, M. and Sueur, C. Decision-making theories: Linking the disparate research areas of individual and collective cognition. Animal Cognition, 2013, 16(4), 543–556.

[11] Wang, Y. and Yu, C. Social interaction-based consumer decision-making model in social commerce: The role of word of mouth and observational learning. International Journal of Information Management, 2017, 37(3), 179–189.

[12] Sachdeva, M. and Lehal, R. Contextual factors influencing investment decision making: A multi group analysis. PSU Research Review, 2024, 8(3), 592–608.

[13] Sachdeva, M., Lehal, R., Gupta, S. and Gupta, S. Influence of contextual factors on investment decision-making: A fuzzy-AHP approach. Journal of Asia Business Studies, 2023, 17(1), 108–128.

[14] Koziol, L.F., Budding, D., Andreasen, N., D'Arrigo, S., Bulgheroni, S., Imamizu, H., Ito, M., Yamazaki, T., et al. Consensus paper: The cerebellum's role in movement and cognition. The Cerebellum, 2014, 13(1), 151–177.

[15] Van Overwalle, F., Manto, M., Cattaneo, Z., Clausi, S., Ferrari, C., Gabrieli, J.D.E., Leggio, M., et al. Consensus paper: Cerebellum and social cognition. The Cerebellum, 2020, 19(6), 833–868.

[16] Cannella, A.A., Park, J.H. and Lee, H.U. Top management team functional background diversity and firm performance: Examining the roles of team member colocation and environmental uncertainty. Academy of Management Journal, 2008, 51(4), 768–784.

[17] Michie, S., Dooley, K.J. and Anderson, R.A. Unified diversity in top-level teams: Enhancing collaboration and innovation across boundaries. Health Care Management Review, 2006, 31(1), 60–68.

[18] Zou, X., Tam, K.P., Morris, M.W., Lee, S.L., Lau, I.Y.M. and Chiu, C.Y. Culture as common sense: Perceived consensus versus personal beliefs as mechanisms of cultural influence. Journal of Personality and Social Psychology, 2009, 97(4), 579–597.

[19] Jaffé, M.E., Rudert, S.C. and Greifeneder, R. You should go for diversity, but I'd rather stay with similar others: Social distance modulates the preference for diversity. Journal of Experimental Social Psychology, 2019, 85, 103881.

[20] Nooteboom, B. Cognitive distance, diversity, focus, and trust in geography. The Oxford Handbook of Spatial Diversity and Business Economics. Oxford University Press, 2025.

[21] Edmondson, A. Psychological safety and learning behavior in work teams. Administrative Science Quarterly, 1999, 44(2), 350–383.