

Guest editorial: Managing organizational and strategic decisions in complexity

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Introduction

Organizations today operate in environments characterized by increasing complexity, uncertainty and interdependence. Globalization, digital transformation, sustainability imperatives and technological acceleration continuously reshape managerial decision-making processes, challenging traditional analytical and strategic frameworks. Against this backdrop, the Special Issue “*Managing Organizational and Strategic Decisions in Complexity: Programs, Pathways and Models*” aims to advance scholarly understanding of how organizations can effectively interpret, govern and act within complex socio-economic systems.

Grounded in complex systems theory and interdisciplinary perspectives, this Special Issue builds on the intellectual legacy of the DySES 2022 Conference and the broader research stream on complexity in management studies. It brings together theoretical, methodological and empirical contributions that offer innovative decision-support tools, models and frameworks to address strategic, organizational and societal challenges. The twelve papers selected for this issue collectively demonstrate how complexity-aware approaches can enrich managerial practice and academic inquiry across diverse contexts.

Overview of contributions

The Special Issue opens with studies that focus on *individual and organizational behaviors under complexity*. [Gera et al. \(2026\)](#) examine the transition from university students to entrepreneurs through the lens of the Theory of Planned Behavior, highlighting how education shapes entrepreneurial intentions and actions in uncertain environments. This contribution emphasizes the role of cognitive and institutional factors in navigating complex career and innovation pathways. Complementing this perspective, [Bruttini et al. \(2026\)](#) investigate the relationship between management styles and innovation, offering insights into how leadership approaches can foster adaptability and creativity in complex organizational settings.

A second group of papers addresses *organizational change, performance and human capital decisions*. [Da Ros et al. \(2026\)](#) provide a rich analysis of organizational change in healthcare through data triangulation, illustrating how qualitative and quantitative integration supports decision-making in highly complex and sensitive systems. [Artar et al. \(2026\)](#) advance the literature on human resource management by combining machine learning techniques with an expanded person–environment fit theory to improve hiring quality, demonstrating the value of data-driven approaches in complex talent ecosystems. [Fattoruso et al. \(2026\)](#) further contribute to performance management by proposing a dynamic evaluation model based on P-AHP and aggregation operators, offering a structured yet flexible approach to assessing performance over time.

Several papers in the Special Issue focus on *financial, strategic and network-related complexity*. [Cerqueti et al. \(2026\)](#) analyze the determinants of minibond issuance levels, providing managerial insights into alternative financing strategies for firms operating in complex financial environments. [Trequattrini et al. \(2026\)](#) explore how business networks help manage complexity through an in-depth case study of multi-club ownership in professional football, shedding light on governance, coordination and strategic control in interconnected organizational systems.

Another core theme of the Special Issue concerns *global value chains, supply chains and risk management*. [Sindhwani et al. \(2026\)](#) examine the inhibitors of resilience in multinational



enterprises' global value chains, highlighting structural and managerial barriers that undermine adaptive capacity. [Zekhnini et al. \(2026\)](#) extend this discussion by proposing an integrated framework for risk assessment in Supply Chain 5.0, emphasizing the role of digitalization in enhancing resilience and decision-making under uncertainty. [Bao et al. \(2026\)](#) adopt an evolutionary game-theoretical approach to analyze carbon emission reduction strategies in complex supply chain organizations, offering policy-relevant insights into cooperative and competitive dynamics.

Finally, *sustainability and strategic integration* emerge as central pillars of this Special Issue. [Quintana Sequeira et al. \(2026\)](#) investigate sugar-energy sustainability practices, providing a strategic assessment and actionable managerial implications for balancing economic and environmental objectives. [Valcozzena et al. \(2026\)](#) focus on the sustainability planning process within firms, highlighting the complexity of strategic integration and the challenges managers face when aligning sustainability goals with organizational structures and processes.

Theoretical and managerial implications

Collectively, the contributions in this Special Issue underscore the necessity of embracing complexity rather than simplifying it away. They demonstrate how advanced decision models, data analytics, game theory, machine learning and multi-criteria methods can support managers in navigating interdependencies, uncertainty and dynamic change. From a theoretical standpoint, the papers enrich complexity theory in management by offering empirical validation, methodological innovation and cross-disciplinary integration. From a managerial perspective, they provide practical tools and insights for improving strategic coherence, resilience, sustainability and organizational performance.

Conclusions and future research directions

This Special Issue confirms that managing organizational and strategic decisions in complexity requires new mindsets, models and collaborative approaches. While the selected papers address a wide range of contexts and methods, they collectively point toward promising avenues for future research, including deeper integration of digital technologies, longitudinal analyses of complex systems and stronger links between micro-level behaviors and macro-level outcomes.

We hope that this collection will stimulate further dialog among scholars and practitioners and inspire future research that continues to push the boundaries of complexity-aware management studies.

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