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Configuring Systems to Be Viable in a Crisis: The Role of Intuitive Decision-Making

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Abstract : Volatile, uncertain, complex, and ambiguous (VUCA) conditions threaten systems viability with emerging and novel events requiring immediate and localized responses. Such responsiveness is only possible through devolved freedom and emancipated decision-making. The Viable System Model (VSM) recognizes the need and suggests maximizing autonomy to localize decision-making and minimize residual complexity. However, exercising delegated autonomy in VUCA requires confidence and knowledge to use intuition and guidance to maintain systemic coherence. This paper explores the role of intuition as an enabler of emancipated decision-making and autonomy under VUCA. Intuition allows decision-makers to use their knowledge and experience to respond rapidly to novel events. This paper offers three contributions to VSM. First, it designs a system model that illustrates the role of intuitive decision-making in managing complexity and maintaining viability. Second, it takes a black-box approach to theory development in VSM to model the role of autonomy and intuition. Third, the study uses a multi-stage discovery-oriented approach (DOA) to develop theory, with each stage combining literature, data analysis, and model/theory development and identifying further questions for the subsequent stage. We synthesize literature (e.g., VSM, complexity management) with seven months of field-based insights (interviews, workshops, and observation of a live disaster exercise) to develop a framework of intuitive complexity management framework and VSM models. The results have practical implications for enhancing the resilience of organizations and communities.

Keywords : Intuition, complexity management, decision-making, viable system model
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