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NAVIGATING COMPLEXITY: EXPLORING CYBERNETICS AS A BASIS TO FORM AN OPERATIONAL MANAGEMENT LEARNING SYSTEM IN ORGANIZATIONS.

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Abstract: How can cybernetics contribute to organizations in developing an effective operating management learning system? This question lies at the heart of this article, which aims to explore the evolution of the Cybernetics field and its framework for comprehending organizational behavior and controlling complex systems. Information and the transmission of knowledge have been the central prism of society's development across the ages. The *boom* of the information age, with the accessibility and reach of information through technological advancements, has established a new paradigm of complexity in our modern and globalized world. This complexity is attributed to the depth and breadth of information available and results in a discombobulated state that requires constant coordination, regulation, and control to achieve adequate abstraction over a subject matter in question. Organizations today acknowledge their role as a purposive complex system in society and seek, as a result, a strategy that can cope effectively with an increasingly complex and rapidly emerging set of interacting problems in an increasingly complex and dynamic environment. In this context, information plays a crucial role in an organization's strategy as the input that supports instruction and decision-making, allowing responsiveness and cross-correction action in view of the complex and dynamic environment. In 2023, Forbes estimated that 90% of organizations prioritize data processing initiatives in their operations with the end goal of obtaining a competitive advantage with improved acquisition and retention rates. Despite the organization's focus and effort, transforming and transmitting data to actionable information, knowledge, and understanding remains a significant challenge, as it involves a coherent operation unit that encapsulates technology with human operations. This paper aims to address this challenge by

examining how Cybernetics, through the analysis of feedback loops and information processing mechanisms, offers a viable path toward establishing coordination, regulation, and control essential for the transformation and transmission of data within organizations to form an operational management learning system. The methodology employed in this study involves a comprehensive review of existing literature on Cybernetics and its application in understanding organizational behavior within complex systems. By synthesizing insights from scholarly articles, books, and other relevant sources, the article elucidates the evolution of Cybernetics and its framework, providing a set of principles crucial for managing complexity within organizational domains. As an article in development, the results are anticipated to contribute to the ongoing discourse surrounding organizational management, more specifically in strategy formation of operational processes and systems at the executive leadership level. While the outcomes are yet to be fully realized, the findings are expected to illuminate the potential of Cybernetics to furnish organizations with adaptive systems capable of processing information, learning from feedback, and navigating through uncertainties with a clear path of managerial steerage.

Key Words: Information; Complexity; Cybernetics; Organizational Learnings; Management.