Chapter 4
Future of Management: From Traditional Models to AI-Driven Governance

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ABSTRACT

The future of management is shaped by the convergence of traditional governance models with artificial intelligence (AI). Classical approaches relied on hierarchy, standardized procedures, and human judgment, yet they often prove inadequate in volatile and complex environments. AI-driven governance introduces real-time analytics, adaptive decision-making, and predictive capabilities that extend managerial rationality beyond human limits. Algorithms can optimize resource allocation, monitor performance, and simulate strategic scenarios, offering new forms of organizational efficiency. However, these innovations raise concerns of accountability, transparency, and ethical legitimacy. This chapter explores the transition toward AI-supported governance and argues that the future of management lies in hybrid models, where technological efficiency is balanced with human oversight, contextual awareness, and long-term institutional trust.

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INTRODUCTION

Management as a discipline and practice has always evolved in response to technological, social, and economic change. The rise of industrial capitalism in the late nineteenth and early twentieth centuries gave birth to scientific management, bureaucracy, and the administrative theories that defined the modern firm. These models emphasized stability, predictability, and control, relying on standardized procedures and hierarchical authority to ensure efficiency (Taylor, 1911; Weber, 1978). They were well suited to environments in which demand was stable, competition was relatively contained, and production processes could be optimized through routinization. Over the course of the twentieth century, variations on these models—management by objectives, total quality management, and lean production—emerged, each adjusting to new industrial challenges but maintaining the underlying logic of human-led coordination and rational planning (Drucker, 1954; Womack & Jones, 2003).

By the turn of the twenty-first century, however, it was increasingly clear that these traditional frameworks faced significant limitations. Organizations operated in environments characterized by volatility, uncertainty, complexity, and ambiguity—what scholars and practitioners often describe as *VUCA conditions* (Bennett & Lemoine, 2014). Globalization created interdependencies that amplified systemic risks, while digitalization introduced unprecedented volumes of data and accelerated communication. Crises such as the 2008 global financial meltdown, the COVID-19 pandemic, and escalating climate disruptions underscored the fragility of governance systems built for stability rather than adaptability (Tooze, 2021). Within this context, scholars began to ask whether management, as traditionally conceived, could still serve as a reliable foundation for decision-making.

Artificial intelligence (AI) has emerged as the most recent and arguably most transformative force in this debate. No longer confined to laboratories or niche applications, AI is now integral to organizational life. Firms deploy predictive analytics in supply chains, algorithmic trading systems in financial markets, natural language processing tools in customer relations, and machine learning models in credit assessment and human resource management. These technologies are not simply auxiliary tools: they