


Chapter 3


AI–Augmented Strategic Management Integrating Portfolio Planning, Roadmapping, and OKR Systems

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ABSTRACT

This chapter explores the integration of artificial intelligence into strategic portfolio management, roadmapping, and OKR alignment as a fundamental transformation in how organizations plan and execute strategy in the digital era. It introduces the AI-Augmented Strategic Loop (AISL) framework, which enables continuous sensing, analysis, decision-making, and learning across dynamic business environments. By combining strategic management theory, agile systems thinking, and AI decision augmentation, the chapter demonstrates how intelligent systems enhance adaptability, transparency, and strategic coherence. It further discusses the ethical, organizational, and technical considerations necessary for responsible implementation, including governance, data integrity, and human oversight. Ultimately, this chapter

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positions AI as a meta-layer of intelligence that transforms strategic management from static planning into a continuous, learning-oriented process for sustainable organizational performance.

1. INTRODUCTION

In this era defined by digital transformation, the contemporary business environment is characterized by an unprecedented pace of change, forcing organizations to fundamentally reframe their approach to strategy and execution. The pressure to maintain a competitive advantage now depends on a triad of critical capabilities that enable rapid pivots, data-driven decision-making that cuts through the noise to reveal signals, and the synchronization of long-term strategic ambitions that are sustainable and seamless with day-to-day execution. Traditional strategic management frameworks were meant for a more stable and predictable world of some time, but this new reality reveals that there are still many limitations. Although techniques such as annual portfolio reviews and multi-year roadmaps have provided a clear structure, these methods are increasingly inadequate. It often falters because it relies on static historical data, priority processes that are vulnerable to political and subjective judgments of the organization, and inherent structural inertia that prevents rapid adaptation to market changes, technological advancements, and ever-increasing customer expectations. Recent studies show that effective digital transformation requires the systematic integration of strategic roadmaps and organizational readiness assessments to maintain adaptability in the Industrial era (Ansari et al., 2025). At the same time, data-driven approach methods of portfolio planning are becoming essential to assist decision-makers in navigating complex and dynamic environments with greater precision and objectivity (Bodendorf, 2025).

Table 1. Paradigm Shift: Traditional vs. AI-Augmented Strategic Management (Tong et al., 2025)

Characteristic	Cycles	Data	Bias	Integration	Reporting
Traditional	Static & Annual	Historical Data	Subjective Bias	Fragmented (Portfolio, Roadmap, OKR)	Reactive Reporting
AI-Augmented	Dynamic & Continuous	Predictive & Forward-Looking	Data-Driven	Integrated (AISL)	Proactive Orchestration

Table 1 summarizes the key dimensions of AI-enabled strategic management across portfolio management, roadmap planning, and OKR alignment. This table

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