Chapter 4
Next-Generation BI Adoption:
Strategies to Overcome Organizational and Technical Barriers

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ABSTRACT

Organizations aim to leverage data-driven insights to gain strategic advantages. Next-generation Business Intelligence (BI) systems offer interactive analysis and advanced capabilities, but many enterprises encounter challenges that undermine adoption. This chapter examines the organizational and technical barriers that arise when implementing cutting-edge BI, and it identifies strategies that promote user engagement and data-driven cultures. The findings suggest that consistent

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leadership support, robust data governance, and targeted training programs enable sustained usage. This chapter proposes an integrated framework that aligns emerging BI technologies with organizational readiness. The results encourage executives and practitioners to create environments that support self-service analytics and augmented decision-making. This chapter contributes practical guidelines that advance BI initiatives.

INTRODUCTION

Business Intelligence (BI) refers to the practices, technologies, and tools that collect, analyze, and present organizational data to support decision-making. Organizations have long relied on BI to enhance performance, gain insights, and develop strategic plans. Traditional BI solutions often involve static reporting and limited analytical scope, but advances in technology have sparked the emergence of next-generation BI (Ain, Vaia, DeLone, & Waheed, 2019). This new era emphasizes user empowerment, agility, and intelligent automation. Vendors now offer self-service dashboards, augmented analytics, and cloud-based platforms. These developments promise greater access to data across roles and hierarchical levels. Market forecasts suggest the global BI sector will reach tens of billions of dollars within this decade while adoption remains around a quarter of the workforce (Lees, 2020).

Despite significant investments, enterprises frequently encounter low usage, fragmented adoption, and barriers that interrupt the realization of BI's potential. Barriers can arise from organizational factors such as culture, leadership, and skill gaps, as well as technical issues like system integration and data quality (Lennerholt et al., 2021) (Baumhecker, 2022). Many companies also struggle to transition from legacy architectures to scalable cloud-based infrastructures. These complexities underscore the need to examine strategies that overcome adoption barriers and foster data-driven decision-making.

Organizations invest in next-generation BI, yet adoption often stagnates. This stagnation prevents companies from leveraging real-time analytics, advanced data visualization, and AI-driven insights. While next-generation BI tools possess user-friendly interfaces, new capabilities impose fresh demands on data governance, security protocols, and user training. Without integrative strategies, users tend to revert to manual practices, limiting the value of BI systems (Alghamdi & Al-Baity, 2022). These problems point to a wider research gap in identifying specific organizational readiness factors and technical enablers that lead to effective next-generation BI adoption.

This chapter analyzes how enterprises can mitigate technical and organizational barriers to adopt next-generation BI effectively. It highlights key enablers that drive