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AI-DRIVEN SAP S/4 HANA MIGRATION: A PUBLIC SECTOR BLUEPRINT

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ABSTRACT

Especially in the selective data transition (SDT) process, which is vital for public sector businesses including government agencies and healthcare providers, migrating to SAP S/4 HANA offers great difficulties[1], [2]. This paper investigates an artificial intelligence (AI)-driven SDT architecture using predictive analytics, machine learning, and blockchain technologies to improve data migration security, accuracy, and efficiency in public sector SAP S/4 HANAtransitions[3], [4], [5]. AI-driven solutions solve regulatory compliance, data integrity, and security challenges that are fundamental in public sector environments by automating data selection, transformation, and validation[6], [7], [8]. While blockchain guarantees strong data security and auditability[9], [10], predictive analytics helps migrate by spotting dangers and optimizing resource allocation[11]. The results show the transforming power of artificial intelligence-driven SDT in allowing smooth, compliant, and efficient SAP S/4 HANA migrations, therefore offering both theoretical contributions and practical best practices for public sector companies negotiating digital transformation[1], [12], [13].

KEYWORDS: *SAP S/4 HANA Migration; Selective Data Transition (SDT); AI-Driven; Public-Sector ERP.*

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