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OPTIMIZING DATA MIGRATION IN LEGACY INSURANCE SYSTEMS USING MODERN TECHNIQUES

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ABSTRACT

Data migration in legacy insurance systems presents significant challenges due to outdated technology, complex data structures, and regulatory compliance requirements. This paper explores modern techniques to optimize the data migration process, enhancing efficiency and accuracy while minimizing risks. We begin by analyzing common issues encountered during migrations, such as data integrity, compatibility, and performance bottlenecks. Leveraging methodologies like automated data mapping, transformation tools, and validation processes, we propose a comprehensive framework designed to streamline the migration of critical data assets.

The application of machine learning algorithms can facilitate intelligent data classification and anomaly detection, further improving data quality during the transition. Additionally, the integration of cloud-based solutions provides scalable infrastructure, allowing for real-time monitoring and adjustments throughout the migration lifecycle. We also discuss best practices for stakeholder engagement and training, emphasizing the importance of cross-functional collaboration to ensure a smooth transition.

By implementing these modern techniques, insurance companies can significantly reduce the time and costs associated with data migration while enhancing data usability and compliance with industry standards. This study not only contributes to the existing body of knowledge on data migration in insurance but also serves as a practical guide for organizations aiming to modernize their legacy systems effectively. Ultimately, optimizing data migration can lead to improved operational efficiency, better customer experiences, and increased agility in responding to market changes.

KEYWORDS: Data Migration, Legacy Insurance Systems, Modernization, Data Integrity, Automated Data Mapping, Transformation Tools, Machine Learning, Cloud-Based Solutions, Scalability, Best Practices, Regulatory Compliance, Operational Efficiency, Data Quality, Stakeholder Engagement.