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## **AI-Powered Revenue Management and Monetization: A Data Engineering Framework for Scalable Billing Systems in the Digital Economy**

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As the digital economy expands, businesses require scalable and intelligent billing systems to optimize revenue management and monetization strategies. This paper presents a data engineering framework for AI-powered revenue management, focusing on automation, predictive analytics, and real-time processing to enhance billing accuracy, fraud detection, and customer segmentation. Traditional billing systems often struggle with scalability, inefficiencies, and compliance challenges. By leveraging AI and machine learning, organizations can implement dynamic pricing models, forecast revenue trends, and personalize billing strategies. The proposed framework integrates cloud-based data pipelines, real-time transaction monitoring, and anomaly detection algorithms to improve financial decision-making and operational efficiency. Additionally, we explore the role of AI in regulatory compliance, error reduction, and adaptive monetization strategies. This study highlights how AI-driven data engineering transforms revenue management, enabling businesses to scale effectively while maintaining financial integrity in an increasingly digital and data-driven marketplace.