Impact of IoT Integration on Enterprise Resource Planning (ERP) Systems: A Comprehensive Literature Analysis

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Abstract

The integration of Internet of Things (IoT) technology with Enterprise Resource Planning (ERP) systems has gained significant attention in recent years. This research study aims to provide a comprehensive analysis of the impact of IoT integration on ERP systems. The study explores the benefits, challenges, and potential solutions associated with combining IoT and ERP. The findings highlight that IoT integration with ERP offers several advantages, such as real-time data collection, improved supply chain visibility, enhanced asset tracking, and predictive maintenance capabilities. These benefits lead to increased operational efficiency, reduced costs, and better decision-making. The integration of IoT with ERP also presents challenges that need to be addressed. These challenges include data security and privacy concerns, IoT traffic, and data management. The research identifies potential solutions and best practices to overcome these challenges. Furthermore, the study discusses the implications of IoT integration on various functional areas of ERP systems, such as healthcare, manufacturing, logistics, inventory management, and customer

relationship management. The research methodology includes an extensive review of existing literature and case studies. This research provides valuable insights into the impact of IoT integration on ERP systems, offering guidance for organizations considering already implemented IoT-enabled ERP solutions or currently implementing ERP solutions.

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