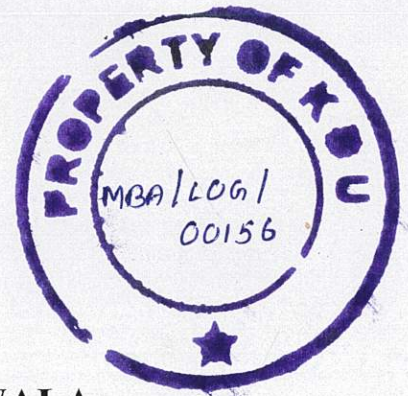


**IMPACT OF ENTERPRISE RESOURCE PLANNING ON SUPPLY  
CHAIN MANAGEMENT PERFORMANCE: A STUDY BASED ON  
BIYAGAMA FREE TRADE ZONE**

by

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## ABSTRACT

This study examines the impact of Enterprise Resource Planning systems on supply chain management performance, providing a comprehensive analysis of how ERP integration enhance various aspects of SCM. The entire study was based on the companies located at Biyagam Free Trade Zone. Supply Chain Management Performance were tested with the assistance of independent variables such as Opportunities of ERP Implementation, Effective Decision Making, Internal Processes and Customer Management, Compliance with Regulatory Regime and the Challenges of ERP Implementation. The research adopted a systematic literature review followed by a descriptive analysis. Primary data were generated through 56 companies and 112 employees from the Biyagama Free Trade Zone. The employees were selected by using a disproportionate random sampling method. Regression analysis was conducted to determine the validity of the factors considered to test the Supply chain Management Performance. In the ANOVA analysis the results indicated that there is a significant relationship between ERP implementation and the Supply Chain Management Performances. The results of the linear regression analysis also indicated the existence of positive significant correlation between the supply chain management performance and the independent variables. Most of the respondents are satisfied with the introduction of ERP system in their work place since it creates an automated works, effective decision making, minimize time spent of puerperal works and by passing all negative challenges. The opportunities presented by the ERP system was highlighted by the participants. Such opportunities include the increase level of useful information, effective management of customer needs and feedbacks, effective flow of internal processes, enhances performances in every sphere. These participants give positive effect concerning the supply chain management performances as well. It is recommended that the managers at all levels should make interventions on the challenges of implementing ERP on supply chain management performance to improve it further. Key areas of improvement include data accuracy, process efficiency, inventory management, demand planning, supplier and procurement management, order fulfilment, logistics optimization, performance monitoring, risk management, sustainability and scalability. The findings suggest that ERP systems significantly enhance data accuracy and real-time visibility, streamline and automate processes and optimize inventory levels, resulting in cost reductions and improved market responsiveness.

Keywords: Enterprise Resource Planning, Supply Chain Management, Supply Chain Management Performance, ERP Benefits and Challenges, Critical Success Factors of ERP