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**ORAGANIZATIONAL PROCEDURES AND  
ENTERPRISE RESOURCE PLANNING (ERP)  
PROCEDURES IN CONSTRUCTION  
ORGANIZATIONS**

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## Abstract

Enterprise Resource Planning system (ERP) is a business management software that allows an organization to use a system of integrated applications to manage the business. Thus, an ERP in an organization provides much needed up to date information for decision making. All the organisations are increasing the range of technology usage related to information systems, as such ERP has attracted attention of top management in almost all organisations including construction organisations. This is evident from the installation ERPs in construction organisations particularly during decade starting 2010. However, construction organisations have faced many challenges in implementing ERPs due complex functions related estimating and tendering, site operations, asset management, finance management, human resource management and other business functions. Therefore, a systematic study of the gap between typical ERP business functions and business functions of construction organisations is vital for the successful implementation of ERPs.

ERP had attracted many research studies and those are mainly related to the resistance of people, issues related to organizational management and issues related to technological factors. However, there is a lack in research related to the business functions with in construction and general ERP business functions. Hence, the main objective of this study is to evaluate the gap between organizational procedures and Enterprise Resource Planning procedures (ERP) and to establish a framework to meet the organizational processes with according to the ERP. The research was carried out using methods related to quantitative as well as qualitative analysis. A questionnaire survey was carried out for quantitative analysis and data collected through a semi structured interviews was used for qualitative analysis. Further, chi square test was used as the analysing tool.

It is established that there is a significant gap between construction procedures and ERP procedures in most of the business functions related to construction industry. The highest significant gap exists in the area of inventory management. Then the other areas such as Human Resource Management (HRM), Finance Management, Site Operation, Project Management, Purchases, Petty Cash, Estimating and Tendering, Subcontractor Management show a significant gap level respectively.

Ultimately, a framework was developed with suggested options to reduce this gap in the above identified areas. Thus, this framework will contribute to align the construction process and ERP processes as much as possible to have a better management via ERP implementation throughout the construction industry.

**Keyword:** Enterprise Resource Planning, Construction Industry, ERP Procedures, Construction Procedures, Gap Analysis

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## LIST OF ABBREVIATIONS

Abbreviation	Description
ERP	Enterprise Resource Planning
HRM	Human Resource Management
IT	Information Technology
PMBOK	Project Management Body of Knowledge
ICTAD	Institution of construction Training and Development
PID	Project initiation document
BOQ	Bill of Quantities
HR	Human Resource
MR	Material Request
GRN	Good Receive Note
PO	Purchase Order
CEO	Chief Executive Officer
GM	General Manager
PM	Project Manager
CCP	Current construction Project
LAN	Land Area Network





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