Abstract

Construction industry is in big boom in India. In the current financial year itself 49000 new construction projects are coming up. The industry which is so vast and finance intensive, the operations in India are however less standardized and less organized leading to a lot of money being lost, due to thefts on sites, unorganized material management, no proper monitoring on site, delays in project completion thereby losing more money than budgeted. This is the big gap which will be filled up with Hit-office online. Modules included in the project are Daily inward, Measurement tool, DPR.

1. Introduction

ERP systems could be used in the construction industry for the following general purposes: To improve responsibilities in relation to customers. To strength supply chain partnerships. To
enhance organizational flexibility. To improve decision-making capabilities. To reduce project completion time and cost. There are few studies conducted about the implementation of ERP in the construction industry. However most of the concerns have been made within both the owner engineering/project management organization and contractor/supplier organizations; and the impact that these systems will have on the facility engineering and construction delivery process. “In Residential and commercial construction companies, functional areas may include project development, facility management, land development and acquisition, warranty and post-construction support, work planning and preparation, Web-enabled services, real estate and property management, and real-estate sales and configuration management. In addition, the solution enables automated selection of homebuyer options, integration from the original sales contact through actual project system management, use of pervasive devices for remote construction processes, and easy access to executive management information. ERP systems can help push sales and project information to customers, sales representatives, construction managers, subcontractors, investors, financiers, and corporate audiences - all from one source” says a senior consultant, in a private consulting firm that offers these ERP systems.

2. Ease Of Use
Implementing ERP system provides an integrating working environment and it enables automation. The information is available from field level to the management level. It is flexible and facilitates the standardizing process or to accommodate changes and globalization. It also achieves balanced people, process and technology changes across all areas. It also helps in planning and program management practices throughout the program life cycle of a project.

3. System Implementation

3.1. Daily Inwards
Daily material requisition from the site. Monitoring purchase and delivery on the site. The module helps a great deal by being able to receive the material on site from supplier against predefined and approved purchase orders. It also ensures that the supplier sends his bills according to the actual material quantity delivered and the rate fixed up according to actual material quantity delivered and the rate fixed up according to the purchase order thereby avoiding extra bills from the supplier. Material stock management on site can be monitored and balance stock for each material on site at any point of time can be seen online by the concerned person, thereby facilitating timely procurement of material, making necessary financial arrangements for the same and thereby avoiding delays in the construction schedule.

3.1. Measurement Tool
This module is designed for being able to enter the work quantities executed on site on daily basis. The management is able to see daily work progress from the head office for all the sites.

3.2. DPR
In this module, an automatic report is generated on a daily basis from each project site. The record contains the construction activities executed on each day, the material consumed for the activities executed on each day, the labour man power used, the office staff in and out time on the site etc. This report is automatically sent by email to the project manager on a daily basis.

4. System Architecture
The proposed system consists of client and server module in which user can interface to the system with the help of website through browser. Any information or data from the site or H.O. will be transferred to the server the data enter from the site will be available to the authorized user or admin from the H.O. The User from H.O. will allot the material or quotation for the site and will transfer the data. The different department which will be dealing with the ERP are:

### 4.1. Site
- Contract/Billing Project Execution Department.
- Stores Department.
- Sales Department.

### 4.2. Head Office
- Q.S/Budgeting/Estimation Department.
- Centralised Purchase Department.
- Marketing and Sales Department.

### 5. Conclusion
The system will be a smooth, rapid, user-friendly interface, terminal server installation compatible, management of all integral documentation, total control of all levels of access security (who may read, who may create or modify and who may access a module or a report). SQL Server relational database, in house customization of all integrated reports using the included Report Editor, Multilingual options (English, French, Dutch, German and Spanish), print documents in pdf.

### References
6. Biographies

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