

Erp Billing Software Module

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Abstract : ERP system is implemented to manage all aspects of the business such as timely revenue collection, simplified taxation, integrated reports generation, etc. in an integrated manner. Enterprise Resource Planning (ERP) system consists of different sets of software that are used to integrate the business functions in a company or organization. These systems provide an integrated solution which satisfy the needs of an organization and are in high demand by all the organizations. This system needs careful planning and also needs to be organized or else the implementation process is costly and time consuming. If successfully implemented, ERP systems provide many benefits to those organizations that adopt them. Invoices are voucher to reimburse for official expenses. However, fake paper invoices spread in our lives. The appearance of electronic invoices can solve the problem of fake invoices. After a consumer pays for official expenses the business generates a detailed consumption inventory which must be signed by the consumer and inserted into the invoices.

Keywords: ERP, billing, construction.

I. Introduction

1.1 Need

- **To save money:** In this system, all the processes are unified which may currently be fragmented. This unified system increases the cost efficiency and improves business processes.
- **Improved Collaboration:** The features of ERP applications can differ depending upon the program but all of these systems enable you to share and edit data as well as to improve security. This avoids the need to merge the information across different systems.
- **Better Analytics:** An appropriate ERP system includes everything from income and expense statements to customized reports based on metrics. Any individual included in this system has access to these reports at any moment.
- **Improved Productivity:** With this system, you can avoid wasting time completing repetitive tasks manually. An ERP will eliminate this time waste, leading to a positive effect.
- **Happier Customers:** The right ERP system includes lead generation and customer acquisition to late-phase customer service and customer retention.

1.2 Basic concept

An ERP system supports most of the business system that maintains central database. An ERP system depends on a integrated database and a modular software design. The integrated system can allow each and every department of a business to store and retrieve data. The information must be reliable, accessible, and easily sharable. All the business functions in ERP are in a common database. In practice the ERP system may contain a set of unique applications, each maintaining a discrete data store within a centralized database. An ideal system is when a single database is used and contains all data for different software sections. [4]These software modules can include:

- **Manufacturing:** Some of the functions include: System flow management, quality assurance, invoices of material, manufacturing procedure, etc.
- **Financials:** Accounts to be paid, accounts to be received, fixed assets, general ledger and cash flow, etc.
- **Human resources:** Profits, training payroll, time management and attendance, etc.
- **Supply chain management:** Inventory, supply chain management, claiming procedure, order entry, purchasing, etc.

II. Literature Survey

Enterprise resource planning (ERP) system is a highly integrated enterprise information system, which can be used, when successfully implemented, to manage all aspects of the business operations of an enterprise, such as production planning, purchasing, financial cost accounting, materials, management, sales and distribution, human resource and customer service, etc. With the opening up of the economy, there has been an increasing need for organizations to connect each department into a common entity through information

instrument, in order to remain competitive. ERP systems are designed to address such problem of fragmentation, for they could integrate the internal business processes. However, the rate of the successful implementation can remain low and although many enterprises have gained some benefits from ERP systems, they have not exploited the full potential advantages in their organizations.[1]

The operational profile is simply the set of operations and their probabilities of occurrence. In theory, the operational profile shows how to increase productivity and reliability by allocating development and test resources to the essential elements of the software product. As an example, developing and application of the operational profile for the existing software module is shown in this paper. First objective was to implement operational profile just to guide the system testing in the right direction and discover the most used operations and mission critical situations. As a first step, customer types (groups) and user types (groups) are defined. User profile is developed as a result of tracking the different user types on the different customer types. Operations are identified and enumerated with occurrence rates and occurrence probabilities. As a result, operational profile is developed for particular customer group. Test script is designed according to operational profile for the specific customer group. Test script tasks (run types) were derived for every operation from operational profile.[2]

III. Proposed System

The ERP Billing Module consists of various Masters viz. Company Master, Item Master, Party Master, Employee Master, Tax Master.

Company Master is a win form which takes inputs or details from the Company we are dealing with such as Company Code, Company name, Address, Contact details, Company Logo, etc. Government registration details are also accepted along with other details in this master.

Item Master includes fields such as Product name, Group name, unit and rate of the given product and also the taxes levied on that product.

Party Master tells us whether the party we are dealing with is a customer or a supplier and the information about that party. Accordingly, other details related to that party are retrieved from the centralized database.

Employee Master stores the details of the employees working in the organization such as employees personal information, his bank details and contact details.

Tax Master stores details about the various taxes levied on products. So it includes the tax code, tax name and tax rates. All the above Masters give us flexibility to add, modify, save or delete information from the database.

The ERP Billing Module mainly performs the following functions:

Manufacturing Application, Transaction Management, Quality Assurance, Delivery, Sales And Distribution, Reporting, Invoice Generation.

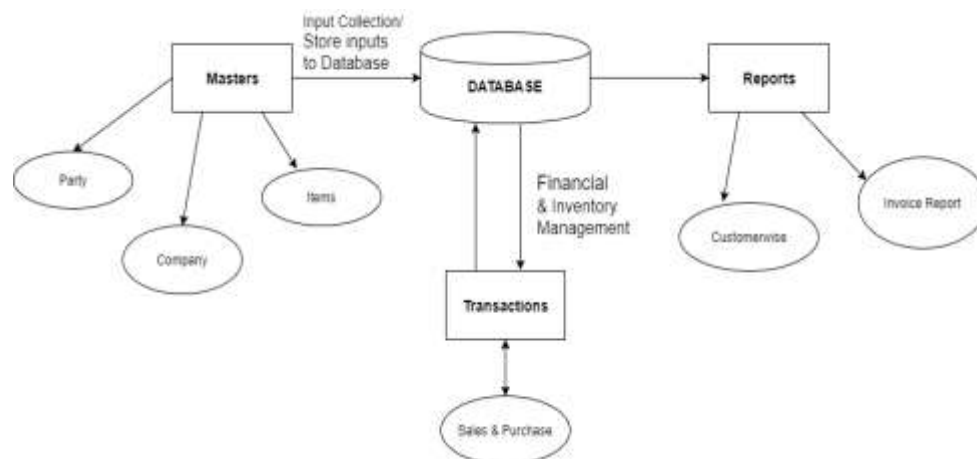


Figure 1: System Architecture

IV. Expected Result

- In our system we do not need to manually enter all the information while generating invoices.
- Each time we generate the reports we need to assemble and provide the information although it already exists in the database.
- Our system will include transportation details such as which truck is allocated to which driver and what the

truck is carrying.

- Also our system will keep track of records of all the raw materials exchanged between the companies.
- Stand alone systems in vogue during the sixties, were incapable of processing planning requirement of an enterprise encompassing production planning, procurement of inventory which became an impediment to adopting Materials Requirement Planning (MRP).

V. Conclusion

Although ERP provides many benefits; implementing it is a strategic thought, involving financial and human resources, proper evaluation and business process re-engineering. There must be a commitment from all modules. An implementation failure leads to bankruptcy of an organization.

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