

A Report on Dhruval Enterprise Resource Planning Solution Implementing Financial Module

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Abstract-Enterprise Resource Planning is a business/technology term for an information system based on a common database and common application tools that allow real-time information to be accessed, shared and compared easily and immediately across organizations, agencies, divisions or departments. The objective of this application is to improve the administrative and operational functions by making them less complicated and more efficient. This, in turn, improves the ability to manage resources well and give better customer service. Basically it includes application modules for the CRM, Accounting, Taxation, Payroll, Inventory, HRMS and other important aspects of a business. This application is built on strong backend database My SQL Server. User management of Dhruval has multi-layer protection and hence users will be able to access data only to extent of privileges they have been given. Package also includes back up facility including auto backup facility.

Index Terms- ERP, Multi-Module, CRM, Backend Database, Multi-layer, Multi-User, Time saving

I. INTRODUCTION

DHRUVAL is Multi-Module and Multi-User ERP (Enterprise Resource Planning) application that incorporates activities athwart functional departments of an Enterprise. It includes features from Customer and Vendor Management, Inventory with work Flow, to Payroll and Billing management. Basically it includes application modules for CRM, Accounting, Taxation, Payroll, Inventory, HRMS and other important aspects of a business. The objective of Dhruval is to improve the administrative and operational functions by making them less complicated and more efficient. This, in turn, improves the ability to manage resources well and give better customer service.

II. OBJECTIVE OF THE STUDY

The Objective of this study is there are the lower level product development companies it will be mostly involved

in developing office automation programs which will be for Bill Preparation, Inventory Management, Payroll Management, Incentive Calculation, Time Sheet Management Etc. ERP is an establishments management system which utilizes a software application to integrate all aspects of the business, and automatize and help the flow of data between vital back office occasions, which may admit financing, dispersion, accounting, inventory management, sales, marketing, orchestrating, human resources, manufacturing, and other operating units.

III. FEATURES

In Additional to Standard Accounting Package, following important features are also incorporated in the application:

A. Customer and Vendor Management

Customer Details and Vendor details are easily captured and maintained in the application. By selecting a customer his financial transactions, list of activities related to him, contact

persons in their organization, and support given can be viewed within the application.

B. Activity

Any activity related to Customer / Vendor / Contact can be stored w.r.t. the respective contact.

C. Billing and Receipts

Along with offering Standard billing requirements like adjustments, discounts, round offs, customizing bill printing, and managing multiple receipts, its allows you to easily configure additional fields and disable optional fields.

D. User Management

Data Security is one of the main concerns. Users can be assigned with Privileges to access only specific modules and also for each module, the user can be assigned rights to View, Edit or Create, ensuring data is properly utilized.

E. Support

Support given to each customer can be maintained in this application. It further helps the company to take important decision like process improvement, on which subjects the company is getting more support calls, etc.

F. SMS

SMS module offers you many features which allow you to send SMS easily to either single person or many people at a time. Data available in ERP can be mail merged and hence can be automatically customized to a specific person.

G. Important Dates / Activities

Important Date can be marked and it viewed as a reminder on the Dashboard Screen when the user logs in. Important dates that are specific to a user and important dates mentioned by the administrators, both will be shown on the respective user’s dashboard on logging in.

H. Utility

In the utility section there are some very useful tools which will help you to optimize your database. It will provide you important reports such as identifying customers with missing contact details, indicating customers that are not associated with any bills, etc. which will help you to optimize your database [6].

I. Backup and Restore

Backup of all the data can either be taken at given point of time or Regular backups can be scheduled to ensure that the Companies crucial data is not lost.

IV. FLOW DIAGRAMS

A. Data Flow Diagram

This diagram identifying data that will transfer one module to another module.

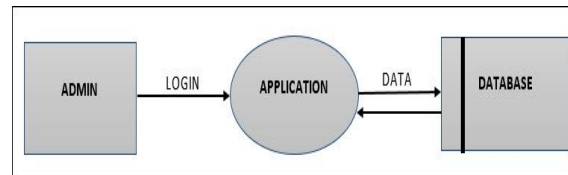


Fig.1 Level 0 DFD of login

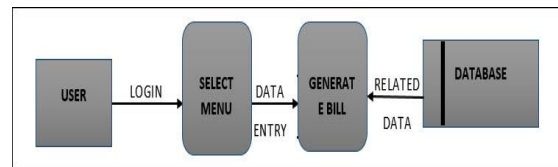


Fig.2 Level 0 DFD of bill generation

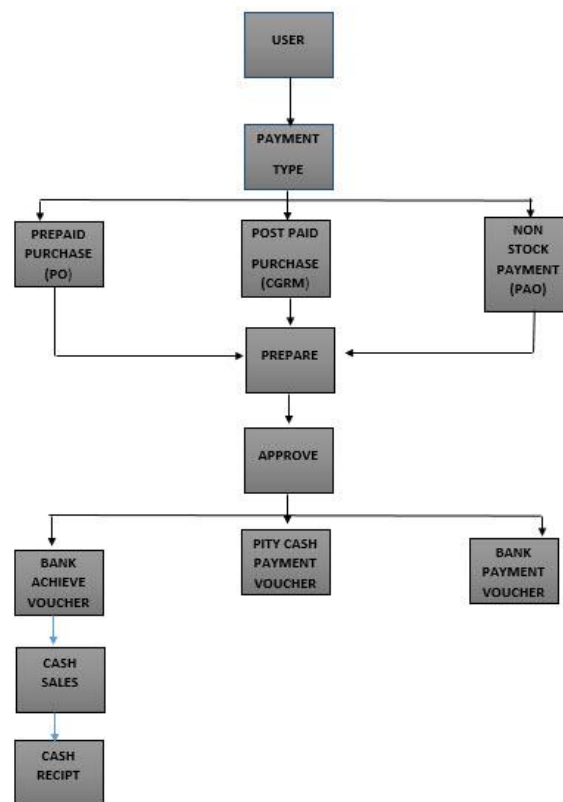


Fig.3 Level 1 DFD of bill generation

B. Use Case Diagram

Its display how Dhrupal interaction with user.

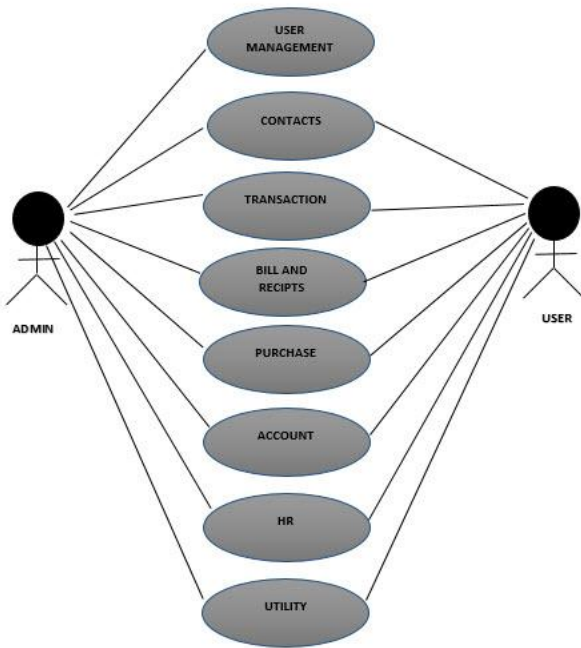


Fig.4 Use case of menu selection

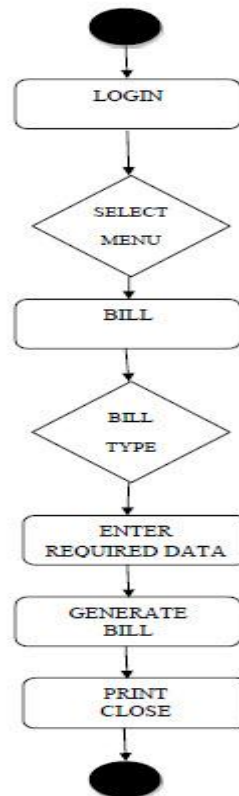


Fig.6 Activity of bill generation

C. Activity Diagram

Below images describe dynamic aspects of the system.

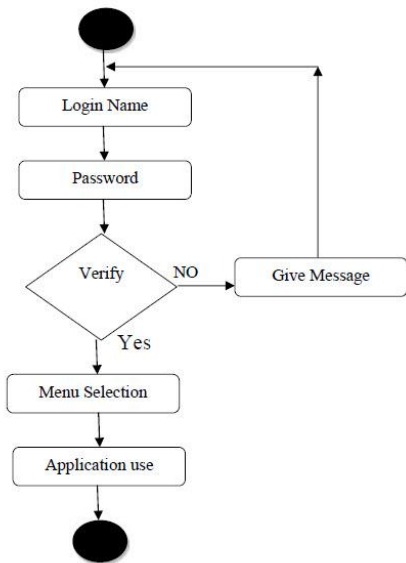


Fig.5 Activity of login

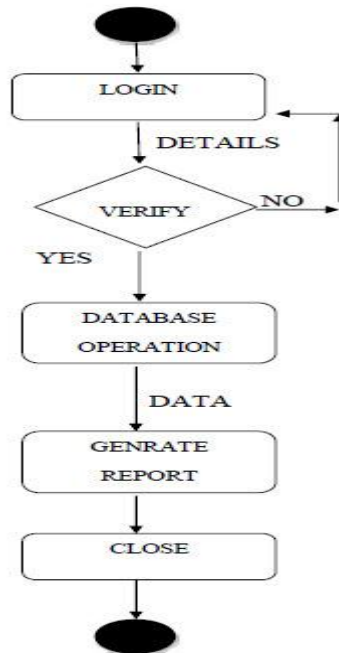


Fig.7 Activity of report generation

V. MODULE DESCRIPTION

Dhruval having 6 components:

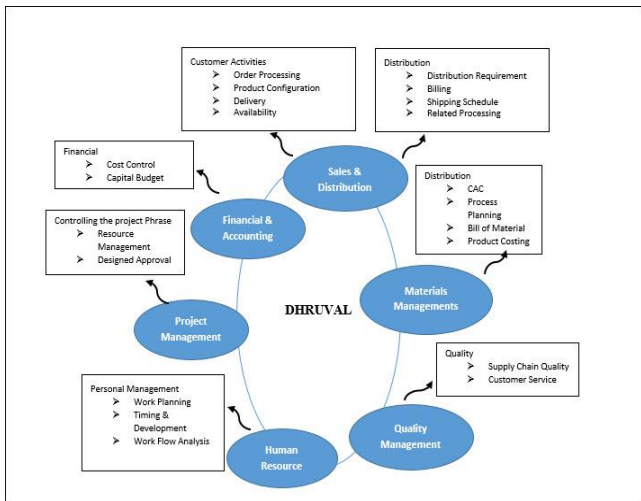


Fig.8 Block diagram of "Dhruval"

A. Project management module

In Project Management Module has availed to orchestrate, organize, and manage resource pools and spring up resource estimates. Depending the sophistication of the application, resource including estimation and orchestrating, scheduling, cost control and budget management, resource allocation, collaboration application [9], communication, decision-making or administration systems. They are finding their way into virtually every type of business. In the early days, however, project management application ran on sizably voluminous mainframe computers and was utilized only in the immensely colossal projects.

B. Material management module

This module deal with campus orchestrating and building design for the kineticism of materials, or with logistics that deal with the tangible components of a supply chain [12]. Categorically, this covers the acquisition of components and supersessions, quality control of purchasing and injuctively authorizing such components, and the standards involved in authoritatively mandating, shipping, and warehousing the verbally expressed components. In generally quantified by accomplishing on time distribution to the customer, on time distribution from the supply base, procuring a freight budget, inventory shrink management, and inventory precision.

C. Quality management module

For quality control of the management of a company is a way of life [14]. It has to be inserted and conducted by top management. This is an impotent point. Top management leadership and will not obey, to implement the quality management often fail[14] but just assigns and pays lip accommodation. This deals with the supply chain management, customer accommodation and plant Human resources management is responsible for the magnetization, cull, training, assessment, and rewarding of employees, while withal overseeing organizational leadership and culture, and ascertaining compliance with employment and labour laws. In circumstances where employees desire and are illicitly sanctioned to hold a collective bargaining accidence, HR will withal

management. In generally the product will formalize and verify the some steps of quality control checks.

D. Sales management module

Sales management is a business discipline which is fixated on the practical application of sales proficiencies and the management of a strong sales procedures. It is a predominant business function as net sales via the sale of products and accommodations and resulting profit drive most commercial business. Sales management involve strategy, setting profit-predicated sales objectives, allotments, sales estimating, demand management and the inditement and performance of a sales plan.

A sales program is a strategical document that abstracts the business targets, imaginations and sales activities. It generally follows the conduct of the marketing plan, strategic orchestrating and the business plan with more categorial point on how the targets can be reached through the genuine sale of products and accommodations.

E. Finance management

Financial systems management it distributes a plenary integrated range of functions, including general ledger, accounts payable and accounts receivable, comprehensive budgeting, asset accounting, cash management capabilities, and other dedicated implements. As a core module in the Enterprise Resource Orchestrating (ERP) solution suite, it places efficacious financial management at the heart of your business systems and processes.

Dhruval ERP is a potent set of implements to avail us confidently streamline time consuming accounting processes, manage your business' involute finances, and comply with regulations.

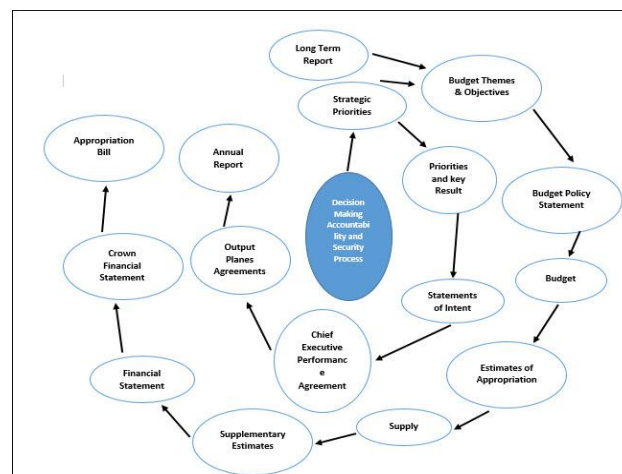


Fig.9 Block diagram of "Finance module"

F. Human resource management

accommodate as the company's primary liaison with the employees' representatives. On the entirely, these ERP systems have their origination on application that incorporates data from dissimilar applications into A public database [8][15]. Linkage of its financial and human resource [8][15] faculties through one database is the most paramount distinction to the separately and proprietary arose

predecessors, which builds this application both fixed and conciliatory [8][10].

VI. CONCLUSION

This Application has been developed with adding new features to the existing system. In this application Multi-Module and Multi-User ERP application that integrates activities across functional departments of an enterprise. This application saves considerable amount of time spent for the maintaining the records and generating reports. All the objectives of the system specified are yet to be achieved. A consistent and efficient system has been successfully developed, implemented and tested [11]. The system has been developed using C# as front end and MySQL database as a back end [13]. The system is very flexible and user friendly, so further changes can be incorporated into this system easily. Adequate documentation provides for maintenance and future enhancement.

VII. FUTURE WORK

The Proposed system is there in the desktop application in future we are implementing the web based ERP application with server database. Giving more security to application needs to be extremely tested to find out any security gaps. Further the system may be applied in several other types of auditing operation like Network auditing, advanced financial reports, graph based reports and similar workflow based reports has to be implement.

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