Designing the Process of Stores Management for Implementing ERP in Manufacturing Organization: Case Study

Sushil kumar Choudhary [1], Rajeev Suman[2], Niraj Gupta[3]

1.Department of Production Engineering, G.B.Pant University of Agriculture & Technology Pantnagar,U.S.Nagar, Uttarakhand

2.Department of Mechanical Engineering, G.B.Pant University of Agriculture & Technology Pantnagar,U.S.Nagar, Uttarakhand.

3.Department of Mechanical Engineering, Ramsawroop Memorial University, Lucknow, Uttar Pradesh

raje.suman@gmail.com

Abstract

This paper describes the importance of ERP in manufacturing industries and examines the various articles published by eminent Researchers in the field of ERP. Enterprise Resource Planning (ERP) software presents a frame work for organizations to better utilize their processes. The report is about windows based application. The main idea of this paper is to handle the all details of stores management system. In this project software package has been developed to smoothen the processing of item transaction in stores such as item receive, item issue & report generation such as stock statement, issue register & receive register etc. This Software will help in automating all the process like receiving and issuing application in stores.

Keywords – SQL, ERP, RM Stores, PM Stores, Client/Server technology.

1. Introduction

ERP is the acronym of Enterprise resource planning. ERP basically utilizes ERP software applications to improve the performance, efficiency, facility, data security, eliminate human error, reduction data entry and speedy accurate reporting of material transaction of organization. According to Satzinger-Jackson-Burd, ERP is a process in which an organization commits to using an integrated set of software packages for key information systems to improve the effectiveness and efficiency of the enterprise. An ERP application is a software system that manages successfully the relations between various functional departments, the infrastructure of business intelligence and different reporting needs as well as the backbone of business processes and workflows in a corporation. Enterprise resource planning (ERP) software programs are at the cutting edge of information system technology. ERP programs help to manage company- wide business processes, using a common database and shared management reporting tool. ERP software supports the efficient operation of business activities, including sales, marketing, manufacturing ,accounting and staffing. Today's business people (and tomorrow's) should ERP system in Kenya. The finding of this study should provide to management of firms implementing ERP system a better understanding of the likely challenges they may face and put in place appropriate measures to help mitigating the risk of implementation failures. Strateman and Roth [10], Through a questionnaire survey of north America manufacturing users of ERP systems identified eight   generic constructs(strategic information technology planning, executive commitment, project management, information technology skills, business process skills, ERP Training, learning, and change readiness) that are hypothesized to be associated with successful ERP adoption.

2. Case Study

2.1 About The organization:

The Eveready Flash Light Company (TEFCO) is The Division of Union Carbide India Ltd. This is the only flashlight plant of the parent company. This is the light engineering industry most of the metal sheet work is being done along with some plastic components molding. The Plant manufactures the full Range of DigiLed, Brass, aluminum and plastic torches. Stores of company mainly handle by three Divisions:

RAW MATERIAL STORES (RM STORES): Raw Material is Backbone of any production.

PACKED MATERIAL STORES (PM STORES): The material related to further processing is stored in PM store.

ENGINEERING STORES: This store is related to maintenance and handling of Equipment and Tools.

Main objective of the present work is to developed ERP package for the stores management of The Eveready Flashlight Company (TEFCO). Item Transaction in the stores classified mainly into three modules: 1. Items receive Entry & 2.Items issue Entry (In house) & 3. Items issue Entry (outside). Transaction resulting in a change in stock. An items receipt leads to an increase in stores stock. Items or material can be Received from vendor through material receive note. Items issue leads to a reduction in stores stock. Items can be issued to Employee, Department, Customer, vendor, sub contractor through issue number. Report generations of stores are (i) Stock statement: stock of item according to the item id (ii) Issue Register: issue of item Report generates

according the party wise between two specific dates (iii) Receive Register: Receive of Item according to the party wise.

2.2. ERP Software package development life cycle

The various stages of ERP Software package development life cycle are: system planning, system analysis, requirement analysis, system designing, coding and Testing & Debugging, implementation, maintenance etc. Brief description about the stages is given below.
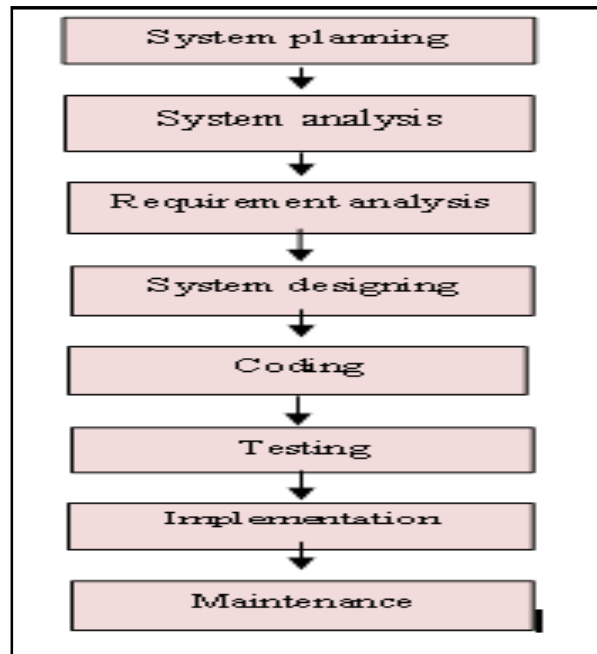
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Fig-2

2.2.1 System Planning

Success in any enterprise system always starts with leadership at the top management. Carefully choose the software and the vendor: begin with proper needs analysis; map the current and desired processes; document the process to facilitate compliance; prepare a formal request for proposals for vendors to meet well defined need. Selecting new ERP system software is a difficult task and one of the most risky decisions that most companies face. Moreover, ERP package is not like other off-the-shelf package such as word-processing, spreadsheet, or database software, but rather sophisticated and complex software for the areas of enterprise processes. An enterprise should choose an expert and a clear method to help select the software system. The complexity of selecting ERP package software can add a lot of time to the ERP system project

2.2.2. System analysis

System Analysis is the process of planning a new System to either replace or complement an existing system. But before any planning is done the old system must be thoroughly understood and the requirements determined. System Analysis is therefore, the process of gathering and interpreting facts, diagnosing problems and using the information to re-comment improvements in the System. Or in other words, System Analysis means a detailed explanation or description. Before ERP Implementation a system under consideration, it has to be analyzed. We need to study how it functions currently, what are the problems, and what are the requirements that the proposed system should meet.

2.2.2.1 Analyzing Existing System

At present the stores management of TEFCO does not have any automated system to manage the data of, receiving, issuing, of raw material, capital goods, packing material and finish product. They have to rely on manual system which is time consuming. They have to create and maintain all the data masters for addition, deletion or modification to any data or retrieval of data requires lot of time and effort.

Limitations of the Manual System:

- Maintenance and updating data is difficult.
- It is very tedious.
- All information is not placed separately.
- Slow Speed and very time consuming.
- Not user-friendly environment.

- Storage of bulky files is a problem.
- It is difficult to found records due file management system.
- No efficient method for searching the record of the particular state.

2.2.2.2 Proposed System

After studying the existing manual system, the need for a change was recognized and system development life cycle initiated. We proposed a new system in which all the details of material, product transaction handled by a computerized system rather than a manual system.

The following performance characteristics should be taken care of while developing the system:

- User friendliness
- User satisfaction.
- Response time
- Error handling
- Robustness
- Faster response
- Complete Security of Data

1.2.3. Requirement analysis

Requirement Analysis is the process of understanding the customer & users and top management expectations from a proposed system or application and is well defined stage in the software development. Basic requirement are user & top management requirement, software, hardware, Technology, stores module, report, master data, etc.

2.2.3.1 User & Top management Requirements

Top management and current users' basic requirement of integrated store management are:

- **Result required of items issue Transactions:**

Material document is created

When you transaction an items issue, the system automatically creates a material document which serves as proof of the items issue transaction.

Accounting document is created

Parallel to the material document, the system creates an accounting document.

Items issue slip is created

When you enter the items issue, you can print the items issue slip at the same time

Stock update

After the issue or receive transaction stoke should be updated.

Consumption update

- **Result required of items Receipt Transactions:**

Creation of a Material Document

When you post a items receipt, the system automatically creates a material document which serves as proof of the items movement.

Creation of an Accounting Document

Parallel to the material document, the system creates an accounting document.

Creation of an Item Receipt

When you enter the items receipt, you can print the items receipt at the same time.

Stock Update

Which stocks are updated in the material master record depends on the destination of the items. The stock value is updated at the same time.

2.2.3.2 System Requirements

System requirement are two Types- Software & Hardware

Software Requirement

- Visual Studio .Net 2005
- SQL Server 2005
- Operating system: - Windows XP
- Front End: - Visual Basic 6.0.
- Database- SQL
  Back end: - SQL Database

Hardware Requirement

- Processor: - Intel Pentium III 833MHz
- RAM: - 256MB
- Hard Disk: -80 GB
- Monitor: - 14" VGA.
- Mouse. Any one

- Printer: - For print report or Bill.

2.2.3.3 Technology Requirement for ERP

1. Client/Server technology [11] The Client/Server technology model is the model on which today's software's is developed. A Client/Server model is one in which the client computer is identified separately from the server computer. In this model, the client computer makes the request and the server computer accepts this request, processes the request and initiates a response. Under this model, the client hosts certain parts of the software while server hosts certain parts of the software. This design architecture allows hosting of resources like databases in central locations and distributing resources like user interface and reporting services to other locations. Typically, in a client/server environment, the desktop computers are connected using networking devices like hubs and routers to centrally located servers like database servers, application servers, print servers and file servers. When developing ERP software for an organization, whether located in a single location or spread over multiple locations it is advisable and strongly recommended to design the ERP software based on this model.

2. The Front-end [12] is developed using Visual Basic. A visual programming environment provides all features that are required to develop graphical user interface as ready to use components. The programmer does not have to write code to create and display commonly required user-friendly features each time around. Development tools such as Visual Basic.net or C#.net are required for ERP software development. These tools enable a programmer to create a major part of the ERP software application except the database. These tools have highly advanced features to quickly create data entry forms, client side validations, programs to implement business logic, programs to interact with the database and programs to communicate between different parts of the application. These software tools come with features to debug while creating the above programs, easily manage, maintain and package the ERP software for deployment.

3. The Backend [13] used is SQL server database that ensures total security and no data loss or corruption. The database management systems are warehouses of information, where large amount of data can be stored .

ERP systems use relational database management systems (RDBMS) to store enterprise data. In an ERP system too, a database system is used to collect and store transaction data of an organization. The database software manages this data efficiently and provides features to maintain the integrity of the data. Modern database systems provide many features such as structured query language to directly access the data from the database, transaction mechanism to enable concurrent access of database, stored procedures to enforce business logic, triggers to initiate actions, security to limit access of parts and/or features of the database. ERP software developers should be proficient in using various interface tools of the database software.

The Reports are developed using Crystal Report.

Crystal Reports (for Visual Studio .NET) is the standard reporting tool for Visual Studio .NET. It brings the ability to create interactive, presentation-quality content; to the .NET platform. Crystal report is an integral part of the Visual Studio .NET environment.

2.2.3.4 Requirement of Stores management modules & report of the stores:

(A.) Material Transaction Entry

Material Transaction in stores management classified is three types;

Module-1 Item or product Received Entry

- MRN No. : It determine the voucher no of the received item or product
- MRN Date: Its determine the receipt date of the item or product
- Invoice no.: It specifies the Invoice number.
- Invoice Date: It specifies the invoice date.
- Vendor Name: The complete name of the Vendor.
- Vendor code: It specifies the Vendor code.
- Vendor address: It determines the address of the Vendor.
- Item Name: It contains the name of the item.
- Item code: It represents the code to identify an item. It helps to search the item in the stock according to requirement.
- Qty.: It specifies the received quantity.
- Price: It specifies the per unit price.
- Amount: It specifies the amount of item or product.
- Total Amount: It specifies the total amount of Receiving

Module-2 Issue Item or product Entry In house

- Issue No.: It determine the issue number of the item or product
- Issue Date: Its determine the Issue date of the item or product
- Issuing party: Employee & subcontractor
- Issuing party member id: Employee & subcontractor code.

- Issuing party member name: The complete name of the Employee & Subcontractor.
- Item or product Name: It contains the name of the item or product.
- Item code: It represents the code to identify an item.
- Qty.: It specifies the Issue quantity.
- Price: It specifies the per unit price.
- Amount: It specifies the amount of item or product.
- Total Amount: It specifies the total amount of issue item or product

Module-3 Issue Item or product Entry Outside

- Issue No.: It determine the issue number of the item or product
- Issue Date: Its determine the Issue date of the item or product
- Issuing party: Vendor, customer ,supplier, maintenance vendor
- Issuing party member id: vendor, customer, supplier, & maintenance vendor code.
- Issuing party member name: The complete name of the vendor, customer ,supplier, & maintenance vendor
- Item or product Name: It contains the name of the item or product.
- Type of item: Specifies the type of item.
- Item code: It represents the code to identify an item.
- Qty.: It specifies the Issue quantity.
- Price: It specifies the per unit price.
- Amount: It specifies the amount of item or product.
- Total Amount: It specifies the total amount of issue item or product

(B) Report of the stores

Report generation is used to drive the statistics of the issues stored in the database based on the required parameters.

A- Stock statement

Item id: stock statement according to the id or all items.

Item type: stock statement according to the type of Product.

B- Issue Register

Issue Transaction between two specific dates according to the party wise such as customer, subcontractor, supplier, employee, & maintenance vendor etc

C- Receive Register

Receive transaction between two specific dates according to the party type such as vendors.

2.2.4 System designing:

Designing is the most important phase of software development. It requires a careful planning and thinking on the part of the system designer. Designing software means to plan how the various parts of the software are going to achieve the desired goal.

- **Data flow diagram**: Data Flow Diagramming is a means of representing a system at any level of detail with a graphic network of symbols showing data flows, data stores, data processes, and data sources/destinations. The goal of data flow diagramming is to have a commonly understood model of a system.
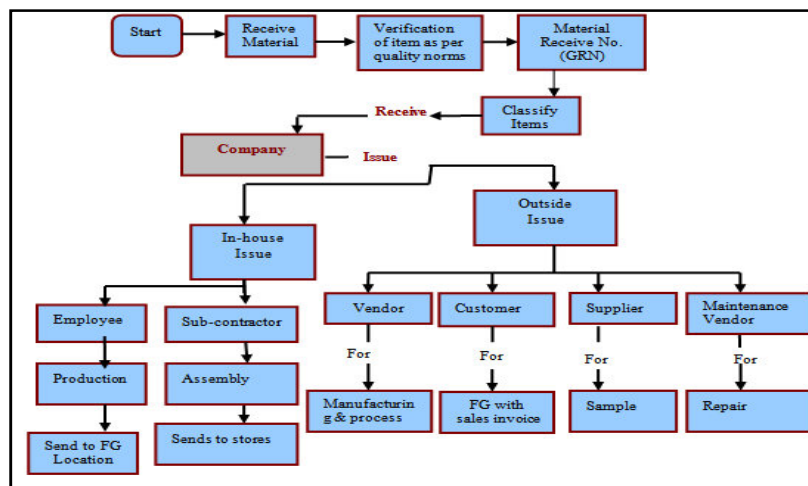

Fig-2

- **Entity Relationship Diagram:** An ER diagram is a graphical representation of an organization's data storage requirements. The entity- relationship (E-R) model is a high-level data model. It is based on a perception of real world that consist of collection of basic objects, called entities, and of relationships among these objects, It was developed to facilitate database design by allowing specification of an enterprise schema, which represent the overall logical structure of database.

1 **Customer**
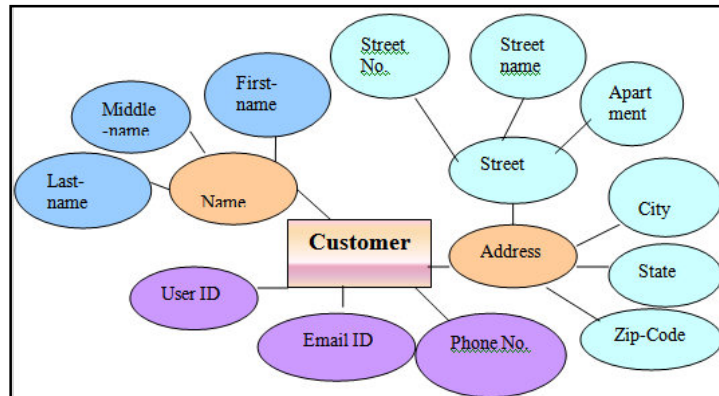
Fig.3

2 **Maintenance**
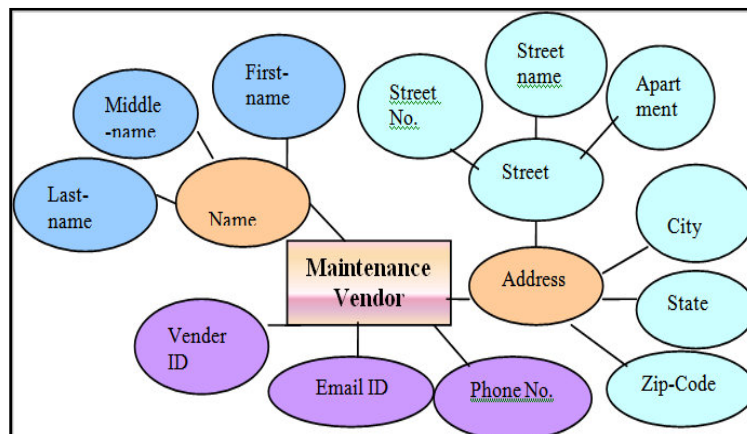
Fig.4

3 **Vendor**
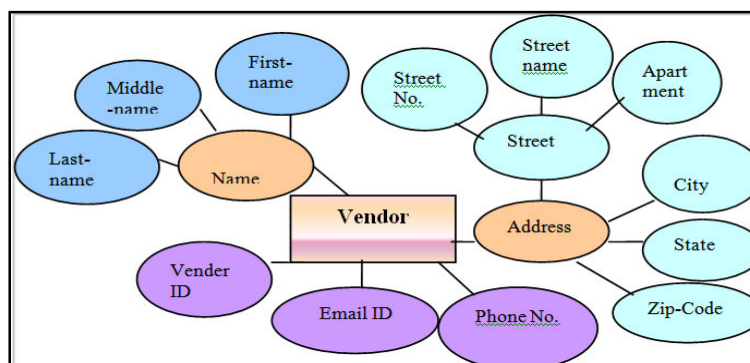
Fig.5

4. Supplier
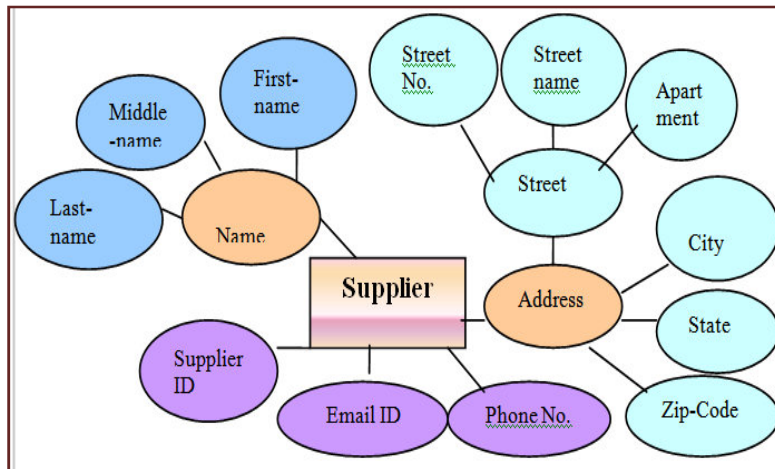
Fig.6

5. Employee
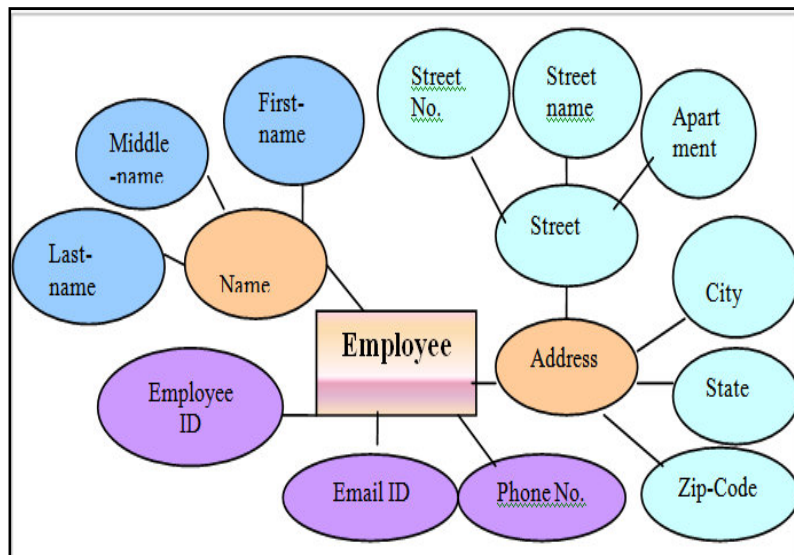
Fig.7

6. Subcontractor
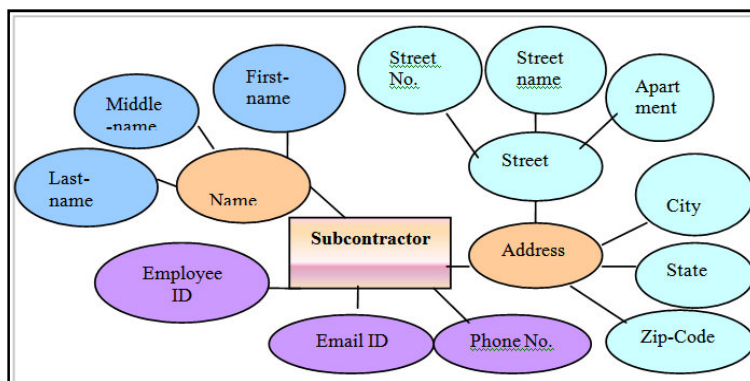
Fig.8

7. Item or product
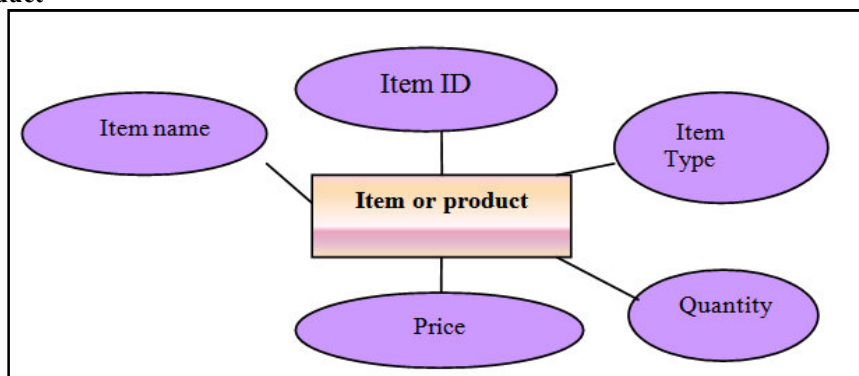
Fig.9

3.2.4.3 Design of database: Database design is the process of producing a detailed data model of a database. The term database design can be used to describe many different parts of the design of an overall database system. In this section, the basic structure of the tables composing the database for the project are shown along with information about primary and foreign keys.

Design of Database Table:

Table-1 Name: Account Master Description: Used to store account information.

S.NO	Column Name	Data Type	Allow Null
1	ID	Int.	not null
2	UID	varchar (50)	not null
3	First name	varchar (50)	not null
4	Middle name	varchar (50)	not null
5	Last name	varchar (50)	not null
6	Apartment	varchar (50)	not null
7	Street Name	varchar (50)	not null
8	Street No.	varchar (50)	not null
9	City	varchar (50)	not null
10	State	varchar (50)	not null
11	Postal code	varchar (50)	not null
12	Phone No.	varchar (50)	not null
13	Email ID	varchar (100)	not null
14	Type	varchar (50)	not null

Table-2 Name: Issue_Material

Description: Used to store issue item information.

S.NO	Column Name	Data Type	Allow Null
1	IssueNo.	int	not null
2	IssueDate	Datetime	not null
3	IssueId	varchar(50)	not null
4	IssueName	varchar(100)	not null
5	IssueType	varchar(50)	not null
6	Amount	numeric(18,2)	not null

Table-3 Name: Item_Master

Description: Used to store item or product Information

S.NO	Column Name	Data Type	Allow Null
1	Id	varchar(50)	not null
2	Name	varchar(50)	not null
3	Price	numeric(18,2)	not null
4	ItemType	varchar(50)	not null

Table-4 Name: Ledger

Description: used to store ledger information

S.NO	Column Name	Data Type	Allow Null
1	Vno	Int.	not null
2	Vtype	varchar (50)	not null
3	Id	varchar (50)	not null
4	Name	varchar (50)	not null
5	Type	varchar (50)	not null
6	price	numeric(18,2)	not null
7	Qty	numeric(18,2)	not null
8	Amount	numeric(18,2)	not null

Table-5 Name: Material_Receive

Description: used to store Material receive information

S.NO	Column Name	Data Type	Allow Null
1	MRNNO	Int.	not null
2	MRNDate	datetime	not null
3	InvNo	varchar (50)	not null
4	InvDate	datetime	not null
5	VID	varchar (50)	not null
6	Vname	varchar (50)	not null
7	Total	numeric(18,2)	not null
8	UserId	varchar (50)	not null

Table-6 Name: Temp_Stock

Description: used to store stock information

S.NO	Column Name	Data Type	Allow Null
1	ItemId	varchar (50)	not null
2	ItemName	varchar (50)	not null
3	Type	varchar (50)	not null
4	Receive	numeric(18,2)	null
5	Employee	numeric(18,2)	null
6	Subcontractor	numeric(18,2)	null
7	Vendor	numeric(18,2)	null
8	Customer	numeric(18,2)	null
9	Supplier	numeric(18,2)	null
10	MentVender	numeric(18,2)	null
11	Closing	numeric(18,2)	null

Table-7 Name: User Login

Description: used to store user login information.

S.NO	Column Name	Data Type	Allow Null
1	StoreID	Int.	not null
2	StoreName	varchar(50)	not null
3	FinancialYear	varchar(50)	not null
4	UserId	varchar(50)	not null
5	Password	varchar(50)	not null
6	UserType	varchar(50)	not null

Table-8 Name: User_Login1

Description: used to store user login 1 information.

S.NO	Column Name	Data Type	Allow Null
1	UserName	varchar(50)	not null
2	Password	varchar(50)	not null
3	Type	varchar(50)	not null

*2.2.5 Coding***:** Using coding techniques and good programming practices to create high quality code plays an important role in software quality and performance.

The system design needs to be implemented to make it a workable system. This demands the coding of design into computer understandable language, i.e., programming language. This is also called the programming phase in which the programmer converts the program specifications into computer instructions, which we refer to as programs. It is an important stage where the defined procedures are transformed into control specifications by the help of a computer language. The programs coordinate the data movements and control the entire process in a system. It is generally felt that the programs must be modular in nature. This helps in fast development, maintenance and future changes, if required.

*2.2.6 Testing & Debugging***:** The aim of testing process is to identify all defects in a software product. Testing is any activity aimed at evaluating the software for quality results it produces and the quality of results it can handle. Testing is an operation to detect the differences between the expected (required) result and the actual result.

Software testing is a critical element of the ultimate review of specification design and coding. Testing of software leads to the uncovering of errors in the software functional and performance requirements are met .Testing also provides a good indication of software reliability and software quality as a whole. The result of different phases of testing are evaluated and then compared with the expected results. If the errors are uncovered they are debugged and corrected.

2.2.7 Implementation

After having the user acceptance of the new system developed, the implementation phase begins. Implementation is the stage of a project during which theory is turned into practice. The major steps involved in this phase are:

- Acquisition and Installation of Hardware and Software
- Conversion
- User Training
- Documentation

The hardware and the relevant software required for running the system must be made fully operational before implementation. The conversion is also one of the most critical and expensive activities in the system development life cycle. The data from

the old system needs to be converted to operate in the new format of the new system. The database needs to be setup with security and recovery procedures fully defined.

During this phase, all the programs of the system are loaded onto the user's computer. After loading the system, training of the user starts. Main topics of such type of training are:

- How to execute the package
- How to enter the data
- How to process the data (processing details)
- How to take out the reports

After the users are trained about the computerized system, working has to shift from manual to computerized working. The process is called 'Changeover'. The following strategies are followed for changeover of the system.

*(i) Direct Changeover***:** This is the complete replacement of the old system by the new system. It is a risky approach and requires comprehensive system testing and training.

(ii) Parallel run: In parallel run both the systems, i.e., computerized and manual, are executed simultaneously for certain defined period. The same data is processed by both the systems. This strategy is less risky but more expensive because of the following:

- Manual results can be compared with the results of the computerized system
- The operational work is doubled.
- Failure of the computerized system at the early stage does not affect the working of the organization, because the manual system continues to work, as it used to do.

*(iii) Pilot run***:** In this type of run, the new system is run with the data from one or more of the previous periods for the whole or part of the system. The results are compared with the old system results. It is less expensive and risky than parallel run approach. This strategy builds the confidence and the errors are traced easily without affecting the operations.

The documentation of the system is also one of the most important activities in the system development life cycle. This ensures the continuity of the system. There are generally two types of documentation prepared for any system. These are:

- User or Operator Documentation
- System Documentation

The user documentation is a complete description of the system from the user's point of view detailing how to use or operate the system. It also includes the major error messages likely to be encountered by the users. The system documentation contains the details of system design, programs, their coding, system flow, data dictionary, process description, etc. This helps to understand the system and permit changes to be made in the existing system to satisfy new user needs.

2.2.8 Maintenance

Maintenance is necessary to eliminate errors in the system during its working life and to tune the system to any variations in its working environments. It has been seen that there are always some errors found in the systems that must be noted and corrected. It also means the review of the system from time to time. The review of the system is done for:

- knowing the full capabilities of the system
- knowing the required changes or the additional requirements
- Studying the performance.

If a major change to a system is needed, a new project may have to be set up to carry out the change. The new project will then proceed through all the above life cycle phases.

Results

Result provide the easy, fast and accurate system for issuing, receiving & and Report generation of the item transaction in the stores. Main user interface of store management are:

(a)User Authentication: User authentication is a means of identifying the user and verifying that the user is allowed to access some restricted service. The server administrator needs to be able to control access on an individual basis; it is possible to require a username and password before being allowed access to a document. This is called **user authentication**. This is the login screen. Here the user (i.e. the authorized official) will login by using their right userID and Password.

Figure-10 User Authentication

(b)Menu interface of store management

1. Administrator
2. Master data
3. Transactions
4. Report
5. Exit

1. **Administrator:** A data base administrator (DBA) directs or performs all activities related to maintaining a successful database environment. Responsibilities include designing, implementing, and maintaining the database system; establishing policies and procedures pertaining to the management, security, maintenance, and use of the database management system; and training employees in database management and use. To insert record of user management.
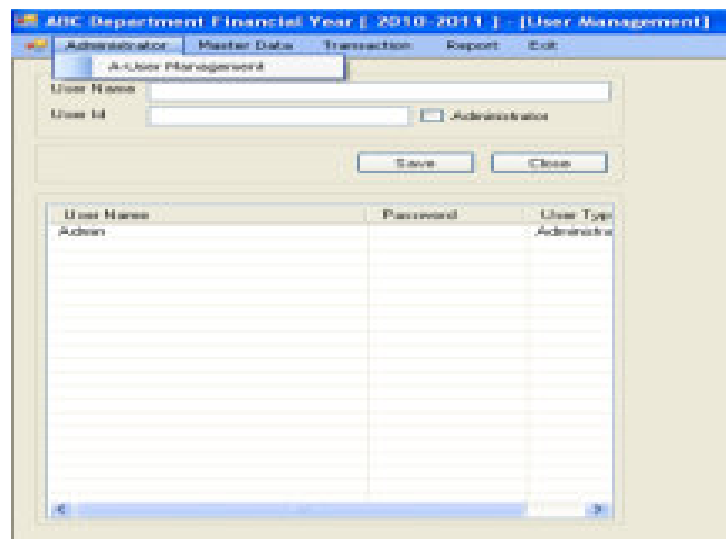
User Management

Fig.11 User management

1.   **Master data:** Most software systems have lists of data that are shared and used by several of the applications that make up the system. Master data may include data about customers, maintenance vendor, vendor, employees, suppliers, Sub contractor & items. Master data is typically shared by multiple users and groups across an organization and stored on different systems. Insert record of master data.

1. Customer Entry: Maintain the customer list, every customer Details & it can be save, update, delete & close the entry.

Fig-12

2. Maintenance Vender Entry: Maintain the maintenance vendor list, every maintenance vendor Details & it can be saved, update, deletes & closes the entry.

Fig.13

1. **Vendor Entry:** Maintain the maintenance vendor list, every maintenance vendor Details & it can be saved, update, deletes & closes the entry.

Fig.14

4. Subcontractor Entry: Maintain the subcontractor list, every subcontractor Details & it can be saved, update, deletes & closes the entry.

Fig.16 Subcontractor Master Management

5. Supplier Entry: Maintain the supplier list, every supplier Details & it can be saved, update, deletes & closes the entry.

Fig. 17 Supplier Master Management

6. Employee Entry: Maintain the Employee list, every employee Details & it can be saved, update, deletes & closes the entry.

Fig. 18 Employee Master Management

7. Item or product Entry: Maintain the product or item list, every item details & it can be saved, update, deletes & closes the entry.
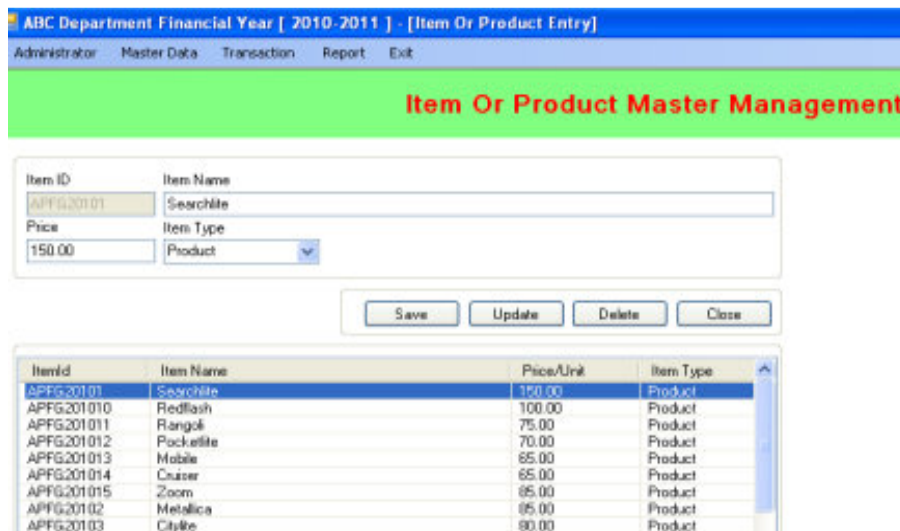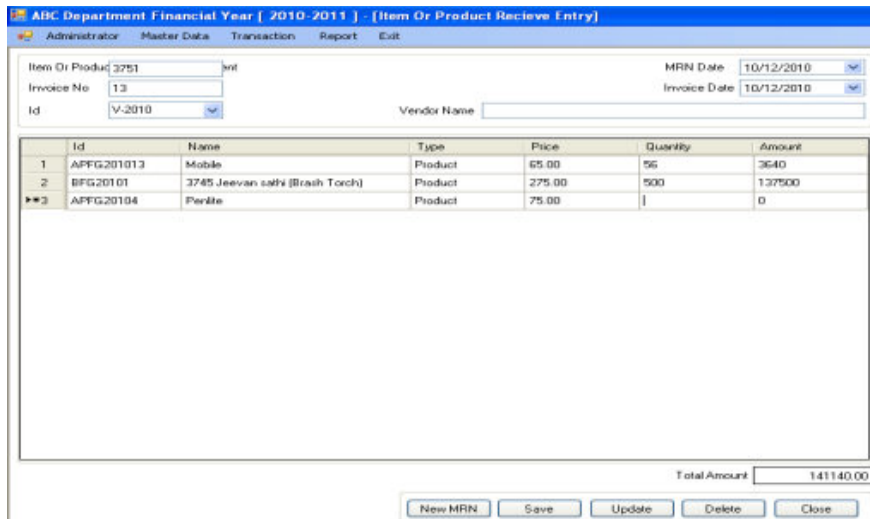
Fig. 19 Item or product Master management

3. Transactions: A transaction is an agreement, communication, or movement carried out between separate entities or objects, often involving the exchange of items of value, such as information, goods, services, and money. Transaction in the stores management classified is three types;
 A- Receive material
 B- Issue Item in House
 C- Issue item in outside
A- Item or product Receive Entry: In this Entry receive of item party wise, date wise & it can be new MRN, save, update, delete & close the entry.
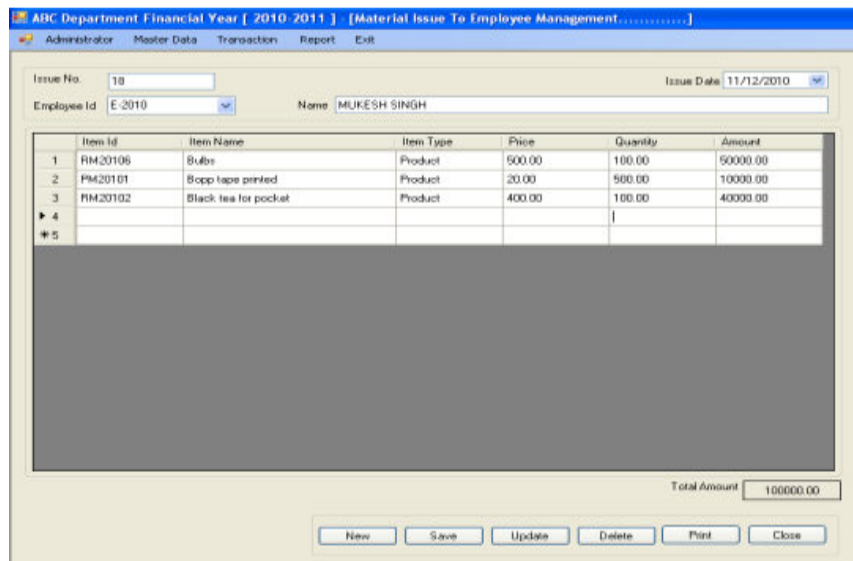
Fig. 20 Item Receive Entry

B- Issue item in house party entry: In this entry issue of item in house according to the party and date wise such as: Employee. Sub contractor. & it can be new issue, save, update, delete, and print & close the entry.

Fig. 21 Item Entry issue to Employee

C- Issue item in Outside Party Entry: In this entry issue of item in outside according to the party & date wise such as: Supplier, vendor, customer, maintenance vendor,. & it can be new issue, save, update, delete, and print & close the entry.
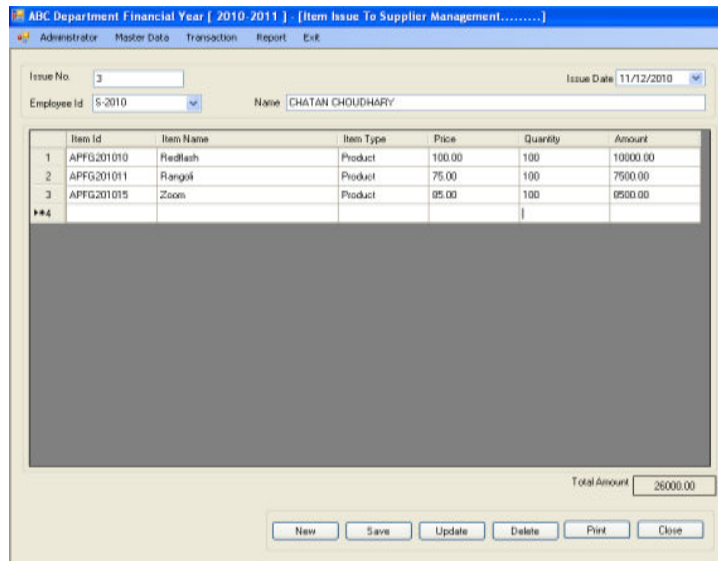
Fig.22 Item issue to supplier

4. Report: Report generation is used to drive the statistics of the issues stored in the database based on the required parameters. Transaction reports list details for issue and receive transactions items in a specific date account over a specified period, Stock Statement for particular items. Report generation classified three types:

      A. Stock Statement
      B. Issue Register
      C. Receive Register

A- Stock statement: Stock of item statement report generates according to the item id or item type.
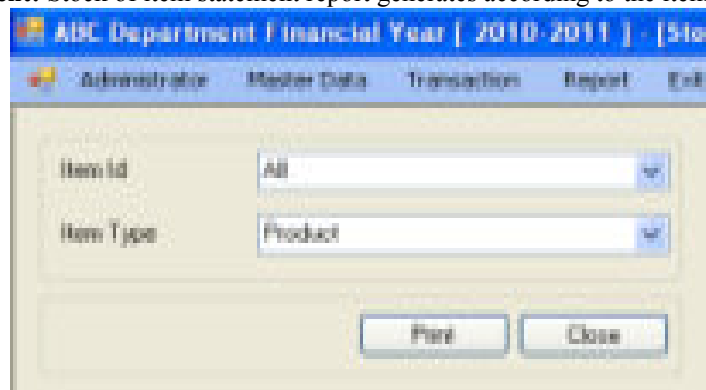

Fig.23 Stock statement

B- Issue Register: Issue of item according to the party wise between two specific dates.
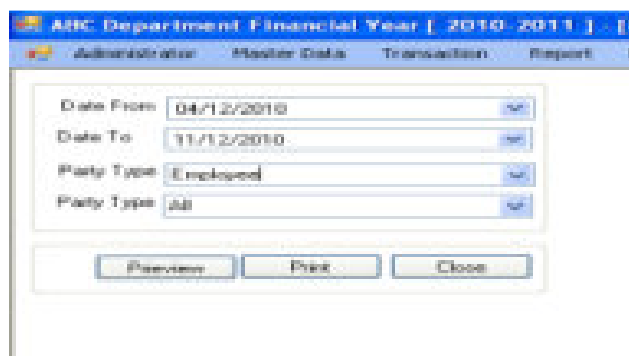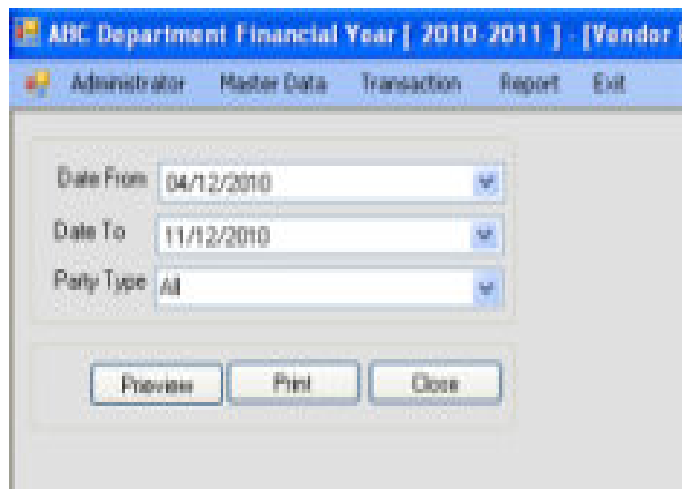

Fig.24 Issue Register

C-Receive Register: Receive of item report generate according to the party wise between two specific dates.

Figure-25 Receive Register

Conclusions

During the course of completion of this Dissertation the various steps involved in the Software Engineering process like System Planning, System Analysis, Requirement analysis, System Designing, coding, System Testing, were implemented in developing software package for stores management. It provides the easy, fast, accurate and efficient system for the user. In this system the record of the each request details are preserved along with their transaction related to them. The system is also made secured as all the updating and transaction can be done by the authorized person. The main purpose of this project is to give all details about the Items transaction in the stores such as , Item issuing, Items receiving, & Report generation about the stock statement, Issue Register, & receive register were successfully developed.

References

[1] Rahul V. Altekar, (2005), "Enterprise Resources Planning", PHI Private Ltd. New Delhi.

[2] Alexis L. (2000), "ERP Demystified", Tata McGraw- Hill Publishing Company Ltd., New Delhi.

[3] Al-Mashari, M. & Al-Mudimigh, A., (2006), "ERP implementation lessons from a case study", journal of Information technology, Vol. 16, No. 1, pp-21-23

[4] Gargeya, V.B. & Brady, C., (2005), "Success and failure factor of adopting SAP in ERP system Implementation", Business Process Management journal, Vol. 11, No. 9, pp. 175-197.

[5] Ehie, L.C., & Madsen, M., (2005), "Identifying Critical Issues In ERP Implementation", International Journal of applied engineering research, Vol. 56, pp. 545-557.

[6] Kalbasi, H., (2007), "Assessing ERP Implementation Critical success factors", Master Thesis, Tarbiat Modares University.

[7] Aloni, D., Dulmin, R. & Mininno, V., (2007), "Risk Management In ERP Project Introduction: Review Of The Literature", journal of Information & Management, vol 44, pp. 547-567.

[8] Cardoso, j., Bostrom, P.R.,& Seth, A., (2004), "Work Flow Management Systems And ERP System: Difference, Commonalities And Applications", Journal of Information Technology And Management, Vol. 5, pp. 319-338.

[9] Otieno, O.J., (2008), "Enterprise Resources Planning (ERP) Systems Implementation Challenge: A Kenyan Case Study", Journal of Business Process Management, PP339-409.

[10] Stratman, J.K. & Roth, A.V., (2008), "Enterprise resource planning (ERP) competence construct: two-stage multi-item scale development and validation", Decision Science, Vol. 33, No. 4, pp. 601-628.

[11] Bayross, I., (2009), "SQL, PL/SQL the programming language of Oracle", BPB publication, New Delhi.

[12] Bhatia M. S., (2007), "A Beginner's Guide to Visual basic 6", Khanna book publishing company (P) Ltd., Delhi.

[13] Yadav, P.K., (2009), "A Database management system", Publication S.K. Kataria & Sons. Delhi.

[14] Walther S., (2009), "ASP.NET 3.5" SAMS Publication, Delhi.