

Office Automation for Industrial Business (AUTO ME)

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Abstract:

Automation plays very important role in our lives. It makes the work easier and simpler so for simplified and easy living. Government of India has proposed Digital India campaign. Making this campaign successful involves reducing conventional methods used by small scale industry. Contributing to this campaign we are proposing a solution for business industry to reduce their paper work. The proposed system will provide database management for employee details. Along with this other modules of the system includes prediction algorithm for predicting site details depending on customer needs. The concept of Office Automation system provides advantage of no data duplication, data prediction and easy data backup with a user friendly interface. Overall project is divided into four modules and these modules can be accessed by admin and supervisor. Admin is authorized to log in and add details worker, client, vendor and also allowed to view the database and update the worker details.

Keywords: Security, query processing, protection, content analysis and indexing, abstracting methods, file organization, record classification, office automation.

I. Introduction

India being a developing country with large number of small scale industry. Making digital India campaign successful involves reduction conventional methods used by small scale industry. This will help to enhance the digital literacy among people. Contributing to this campaign we are proposing a solution for business industry. In small scale business industry there is lot of paper work. To reduce paper work and enhance internal working environment of company we are proposing the solution "Office automation system for small scale industrial business". To reduce manual methods and digitize the internal work process of the company. To reduce time consumption and work with accurate result. To make use of growing technologies and trends for removing day-to-day problems faced by company. To provide cost efficient system. Small businesses can be able to perform all their office tasks from simple desktops or laptops. The use of office automation increased. Exponentially. In the recent years, the use of office

automation to solve increasing tasks has increased exponentially.

II. Literature Survey

Decision Support System:

"A Review of Decision Support Systems for Manufacturing Systems"

This paper, describes DSS application in manufacturing environment. DSS provides efficient management of data by combining human and computer capabilities. It distinguishes between structured, semi-structured, unstructured data and also reduces quantity of data to high quality structured data. Types of DSS are passive, active and cooperative DSS

i)Passive DSS:

It is a system which supports decision making process but does not provide decision suggestions or solutions.

ii)Active DSS:

It is a system which supports decision making process and provides decision suggestions or solutions.

iii)Cooperative DSS:

It is a system that can modify decision recommendations before sending them back to the system for validations. This system improves and adds the suggestions of the decision maker and then sends them back for validation.

DSS Architecture:

The DSS consists of several components they are:

1.DBMS(Database Management System): DBMS is a software package which is used to manage and access data from database.

2.MBMS (Model Management System)

It uses various kinds of models like mathematical model and analytical model to represent and analyze complex data and user interface.

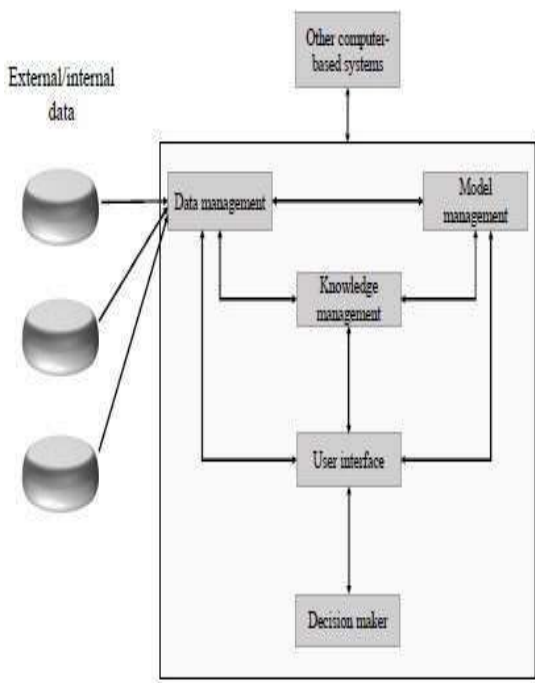


Fig 1.DSS Architecture

Factors considered for MySQL selection

Cost: The most obvious cost associated with database software is the purchase price. MySQL is the most popular free relational database

management system and eliminating any related costs for the system software. While some users may think that free software should be inferior to commercial product, MySQL has been evaluated in a review in PC Magazine as “one of the top five databases”. Also, training and support materials that are also freely available on the web as MySQL is being widely used and grown in popularity.**Performance:** MySQL database system takes a very less storage in disk space while provides a well performance on UNIX and LINUX system. Although MySQL may fall shorts in consisting less features when comes to comparison with other database system, however its own features and capabilities is usually more than enough to handle system that requires a reliable database. Besides, MySQL has complementary features in many areas. For example, partitioning MySQL provides more options for various type of partitioning as it offers range, hash, key, list and composite partitioning.

Ease of use: The aspects of ease of use include the ability to install the software without difficulties, allows user to maintain the software with minimal effort and problems, and also access the software from remote location. Also, supporting materials and documentations can be acquired easily as a reference tool for end users. MySQL comprises all the aspects stated and hence it has become a fast, robust and a reliable open source system. Compare to other existing relational database management system software, MySQL is relatively easy to install and maintain. Furthermore, with the MySQL Server, there are several GUI management tools provided by MySQL for users to download and use. Facilities such as strong modeling tool in MySQL Workbench helps user visually design databases. For beginner who is starting at the most basic level, there are a number of command line monitoring options that can run to get a handle on general server operations.

Security: Security is a vital factor in database selection process, especially when the software system may be accessed remotely by connecting to Internet. Risk can be minimized if security mechanism is adequately employed. MySQL adopts ample security measures from the very beginning. The advantages in security are to allow user to change the port if it becomes vulnerable. Besides, user is required to update

software from time to time to shield them from unwanted users or intruders.

III. Proposed System

The proposed system is a desktop application which enables the admin of system to log into the system and add details of worker. This system consists of four main modules namely HR, Purchase, Sales and Project

A. Architecture



Fig 2. Flow chart

B. HR Department

HR(Human resource) department consists of four different parts as Registration, Attendance, Payment list, Wages & payment. Registration window provides form through which worker can enter his details.

Admin or supervisor can monitor attendance of workers through Attendance module of system. In Payment list section we are providing filtering parameter based on date. This part displays details of

workers with column name as name of worker, month, amount to be paid to particular worker.

Wages & payment section also consists of filtering parameters and it also provides printing option for payment receipt.

C. Purchase Department

Main aim behind purchase department is to store details of purchased materials from different vendors. This module consists of vendor details, purchase and payment and summary of all transactions.

Vendor details are entered into database through registration form. Purchase and payment section will handle all billing functions and also provides printing option for receipt.

D. Sales Department

Functioning of this module is same as that of purchase department. It has three subsections client registration, sales and receipt and summary of all transactions.

Client details are entered into database through registration form. Sales and receipt section will handle all billing functions and also provides printing option for receipt.

E. Projects

This module keeps history of all projects. Based on this data we are providing prediction section in this module. If input is given to prediction system it will predict cost of proposed project, number of workers required for that project, duration and material needed.

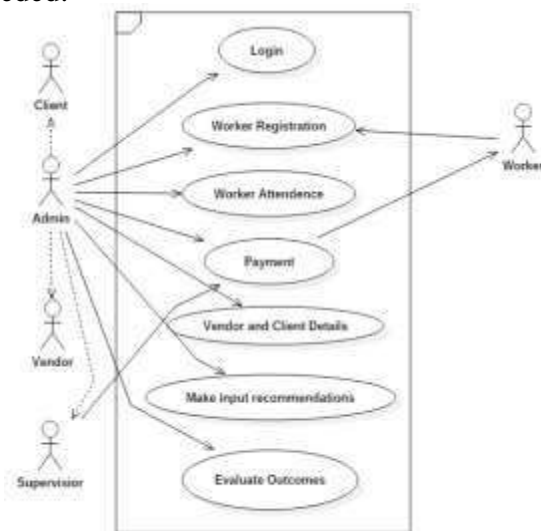


Fig 3. Use case diagram

IV. Conclusion

Office automation is the process of applying modern machines and technology to improve information management as well as the overall performance of an organization. Small businesses are often able to perform all their office tasks from simple desktops or laptops. However, as the business grows or expands, the scales and number of tasks needed to keep the business running increases exponentially.

In conclusion, identifying opportunities for a office automation system is not hard. It just takes effort to slow down and pay attention to what is going on around you. You will be surprised to see how easy it appear when an office automation system come into existence.

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