AN EFFECTIVE APPROACH TO AUTOMATE ERP EDUCATIONAL SYSTEM FOR MULTIUSER ENVIRONMENT

Kiran Suryawanshi, Shashank Bankar, Krutika Raskar, Shradha Kalbhor

[1] *Student , Department of Computer Engineering, PDEA's COEM, Maharashtra, India.*
[2] *Student , Department of Computer Engineering, PDEA's COEM, Maharashtra, India.*
[3] *Student, Department of Computer Engineering, PDEA's COEM, Maharashtra, India.*
[4]*Student, Department of Computer Engineering, PDEA's COEM, Maharashtra, India.*

ABSTRACT

ERP stands for Enterprise Resource Planning and it is a tool which is mainly used in all institutes. ERP systems are the largest software applications adopted by universities, along with quite significant investments in their implementation. However, in an Educational Institute there are various sections and each section handles all Employees information and institutional database. These sections are interlinked with each other. The main aim of this ERP system is to change Educational Institute system from manual work to automated which will be centralized as well as web based. This system is very useful for easy user interface and utilizes powerful database management and retrieval and manipulation of data. The main goal of this software system is to manage all the activities involved inside an Institution with lesser effort.

Keyword: - *ERP system, case study, Modules, ERP survey, Management System, Multi user environment.*

I. Introduction

In this computer age everyone wants fast output. So while using ERP software it is our duty to build such a ERP system for institute to simplify their working. Enterprise Resource Planning (ERP) is a planning which is used by different educational institutes for maintaining and storing their employees data. Each section or department uses ERP system tools for maintaining separate design and database. Enterprise Resource Planning combines all the requirements of the organization together in a single that runs off a single database so departments can share and communicate information with each other. ERP system helps to create user friendly interface. Once the employee of the institute fill the details into the system there is no need for persons to deal with separate sections. Enterprise resource planning is management system which is used to manage departmental data of business. The application that make up the system share data across the various departments that provides the core data.

II. Methodology

ERP (Enterprise resource planning) systems or integral information solutions. Their main aim of this project is to connect all education stream units and all colleges functions into a unified computer system that satisfies the needs of the whole organization. By implementing such system users expect to improve organization efficiency and, consequently, to improve the quality. The benefits of this system is to reduce the paper work and manual work also and time saving. Methodology give the results will measure the performance of the new(ERP) Enterprise Resource Planning systems and what user factors affect a successful implementation. Methodology that have been found to improve the chance of a successful ERP implementation. The companies have been selected on the basis of the company size, branch, transportation and storage, information and communication.
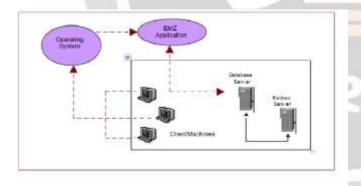
There are various methods for handling the implementation & the consequent conversion from old to the new computerized system and implementation .The most secure method for conversion from the old system to the new system is to run the old & new system in parallel. In this approach, a person may operate in the manual and automated older processing system as well as start operating the new computerized system. This method offers higher security, so that even if there is a flaw in the computerized system, we depend upon the manual system.

III. Related work

Our system that is Enterprise Resource Planning systems provides user friendly interface for educational institute. Our system will assign id and password for every employee of the institute. Upon verification of id and password staff can log into the system. After successful login, the system allow to user to access the provide option such as staff profile, enrolment option which allows staff members to enroll student for any unit, access to list of student can be avail by using student list option, performance option which maintains records for student performance. The scope of this system to provide an overview on process mining. The process mining is the process of discovery, enhancement and compliance checking are especially relevant for audit purposes.

IV. Motivation

This is motivated by the increasing adoption rate of ERP in Higher Education System. Even though we have been studies about the challenges and critical success factors for ERP implementation. Improved information access for planning and managing the institution.

Fig(a) : Internal Data Structure

The main advantages of ERP for higher

education institutions are,

• Improved services for the faculty, students
  and employees;

• Increased income and decreased expenses due to improved efficiency.
• reduce or eliminate manual processes.

- enhance strategic decision making and planning capabilities.
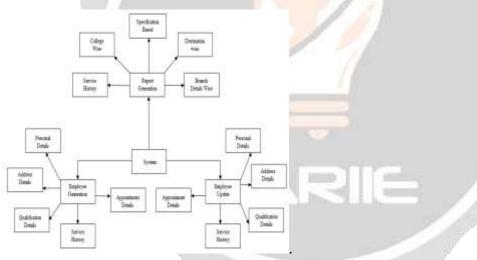- establish a self-service environment for employees.

V. Proposed System

In recent years, several user studies have examined specific usability problems in the field of Enterprise Resource Planning (ERP). These studies focused on different branches, various usability aspects, and several user groups. In spite of this diversification, some common and essential usability problems have become apparent, which are related to system complexity and difficulties in finding required information.

Therefore, this project first addresses the question of whether the identified usability problems are still present today. Second, it extends the research focus to additional considerations, such as the role of menu type, uncertainty in system usage or the support in problem situations.

This system consist of different types of software modules that support institute for a real time activities. Multiple modules are designed to support functions from teaching and non-teaching staff level.

As shown in the Fig(a) , we are developing five different modules. These modules will help the institutional authorities to keep the track of the employees and maintaining their records. All these records will be stored in a single software instead of manual work. As a result of which the chances of loosing employees data decreases. It is easy to implement and also a low cost system.

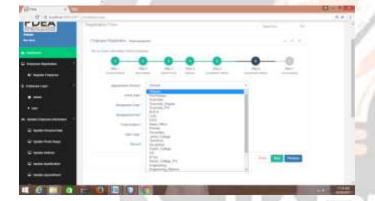Fig(b). System Architecture

Personal details :

The personal details will be filled by the user on their first login to this website. The Employees have to fill their personal details like name, birth date , gender , caste , aadhar no ,PAN no etc.

Appointment Details :
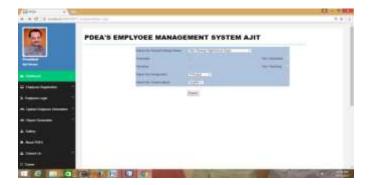
Appointment details module is having information of following sections:

-Appointment Section

-Designation Type

-Grant Type

- Designation/post

-Order Type

-Subject

-Branch

Service History:

       The service history include total experience of staff. In Service history also contain transaction means Pre-primary details and service history contain salary detail of staff. The detailed salary description contain scale pay, grade pay basic component. The staff experience means staffs joining and living date are displayed.

VI. CONCLUSIONS

Based on the case studies findings, several conclusions were formulated and are presented below.
The PDEA'S organization are seeking the benefits of ERP systems as it includes much easier access to reliable information by integrating disparate legacy systems and .

This software helps to maintain all types of details of employee of an institute and also keeping track on them. But by developing this web-based application the administrator can be able to save his valuable time.ERP system implementation is so much useful for eliminate or reduce or the need for shadow system or backup data and increase data integrity, reliability and validity.

VII. REFERENCES

[1] College ERP System, International Journal for Research in Engineering Application & Management (IJREAM) Vol-01, Issue 02, May 2015.
 [2] Focus on Critical Success factors in ERP Implementation International Journal of Engineering Research and Development e-ISSN: 2278-067X, p-ISSN: 2278-800X, www.ijerd.com Volume 11, Issue 11 (November 2015), PP.68-74
[3] ERP System For College Automation Using RFID Tags, Multidisciplinary Journal of Research in Engineering and Technology, Volume 2, Issue 2, Pg.437-446
 [4] Multidisciplinary Journal of Research in Engineering and Technology, Volume 2, Issue 2, Pg.437-446