

AN EFFECTIVE APPROACH OF ERP-BASED HR MODULE FOR ACADEMIC INSTITUTE

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ABSTRACT

With the computerization of business, the HR Module in ERP has a set of rich features and integrates seamlessly with other modules. Enterprise Resource Planning (ERP) systems are adopted by the various academic institutes for key administrative and academic services. ERP based HR module offers wide solutions for HR department making it possible for other department to access specific employee data. This paper focuses on approach of ERP-based HR module for Academic institutes to utilize the Human resources.

Keywords: *ERP System, HR Module, Payroll Management, Personnel Management, Time Management and Organizational Management.*

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I. INTRODUCTION

For any academic institute, the data of their information system is a file, a folder, a book, or any electronic data from any electronic device. The ERP system is the best solution for any information system which keeps your systems simple and then builds your system architecture on this base over a period of time.

Optimization and resource utilization is the key aspect of any Organization which has the willingness to achieve the best result from the existing infrastructure. Institute management is biggest challenge for any organization to avail the desired goals, quality and the targets. ERP systems are adopted by the various academic institutes for key administrative and academic services. The integration of all business functions in Academic institute environment represents the integration of systems for administration, human resource management (monitoring of employees) and finance (accounting, payments, investments and budget) that used to be supported by separate and often incompatible information packages [1].

Today, human resources management is being renewed in organizations and becoming one of the fundamental functions of the project management. HRM has changed from an inactive and problem-solving role to a strategic, focusing on the retention and development of the best human resources (Clemmons and Simon, 2001). Traditional HR practices consisted of activities such as payroll, hiring activities, records management, and reporting and termination activities and similar. Nowadays, HRM takes more of a full service role providing employee support beyond pension planning and career development. With the arrival of ERP systems, HR functions became fully integrated with the operations side of the business. However, the research on HRM in the context of ERP is relatively new and not many studies have been done on the topic [2].

II. ENTERPRISE RESOURCE PLANNING (ERP) SYSTEM

Enterprise Resource Planning systems (ERPs) integrate (or attempt to integrate) all data and processes of an organization into a unified system. A typical ERP system will use multiple components of computer software and hardware to achieve the integration. A key ingredient of most ERP systems is the use of a unified database to store data for the various system modules. Figure1 shows the representation of ERP system [3].

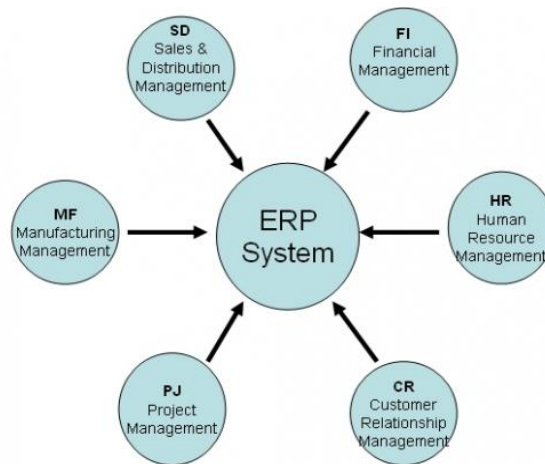


Figure 1. ERP system

A. Benifite of ERP

ERP systems implementations create the following benefits for the companies: [4]

1. Improves the firm's performance
2. Eliminates inefficient manual processes
3. Provides integrated, enterprise wide common tools and processes
4. Reduces the costs by improving the enterprise efficiency through computerization
5. Includes improvements in logistics, production scheduling, and customer service.
6. Customer responsiveness
7. Provides enterprise-wide data visibility, reporting and decision support
8. Contains the ability to manage the extended enterprise of suppliers, alliances.
9. Customers as an integrated wholes

B. Need of ERP system for Academic Institutes

For any academic institute, the importance of data for any information system be it a file, a folder, a book, or any electronic data from any electronic device. The entire objective of building any information system and processes that system which includes:

- It has structured information.
- It does not have duplicate information.
- It has history of information which makes sense.
- It provides all means of simple integration for querying.
- It provides users decision making capabilities.
- It meets its objective of user satisfaction
- It is simple to port to any other system.

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The top reasons universities adopt ERP solutions are to replace legacy systems, improve customer service, and transform enterprise processes, modernize computer systems, improve administration, maintain competitiveness, increase operating efficiency, and adhere to regulatory compliance. The benefits of ERP solutions are that being part of an ERP project is good for one's career; the new systems offer improved services for faculty, staff, and students; administrative, academic, and student data are standardized; university data is globally accessible over the Internet; and the new systems involve less cost and risk than legacy systems[2].

III. ERP-BASED HR MODULE

A. Human Resource (HR) Module

The function of Human Resources departments is generally administrative and common to all organizations. Organizations may have formalized selection, evaluation, and payroll processes. Efficient and effective management of "Human Capital" progressed to an increasingly imperative and complex process. The HR function consists of tracking existing employee data which traditionally includes personal histories, skills, capabilities, accomplishments and salary. To reduce the manual workload of these administrative activities, organizations began to electronically automate many of these processes by introducing specialized Human Resource Management Systems. HR executives rely on internal or external IT professionals to develop and maintain an integrated HRMS. Human Resource Management Systems enabled increasingly higher administrative control of such systems.

Human Resources Management is the organizational function that deals with issues related to people such as compensation, hiring, performance management, organization development, employee motivation, communication, administration, and training. The Human Resource Module in ERP has a set of rich features and integrates seamlessly with other module. ERP HR module offers wide solutions for HR department making it possible for other department

to access specific employee data. The HR modules covers all the function required in business practice and is flexible enough to optimize the business processes by configuring to suit customer's requirement.

Human Resource module streamlines the management of human resources and human capitals. It comprises of four broad sections, mainly Training, Recruitment, Payroll and Attendance. HR module in ERP routinely maintains a complete employee database including contact information, salary details, attendance, performance evaluation and promotion of all employees [5].

B. ERP-Based HR Module

To utilize the available human resources in a way so as to get the work done effectively to the maximum satisfaction of the individual worker, ERP-based HR module will be implemented in academic organizations. HR module which is described in this paper is the combinations of following sub-modules:

1. Organizational Management
2. Personnel Administration
3. Time Management
4. Payroll Accounting

1. Organizational Management

Organizational management includes, organizational structure, staffing schedules & job description. It refers to the data structure of organizational information. It is the discipline that develops and tracks the data on how units in an organization fit together. Within Organizational Management, a structure is defined that illustrates departments, positions linked to the departments, jobs and attributes linked to the positions and then the positions held by employees [6].

Figure 2 shows the data model & relationship among them. This data model contains various data objects that are useful for defining structure in SAP HR organizational management sub module

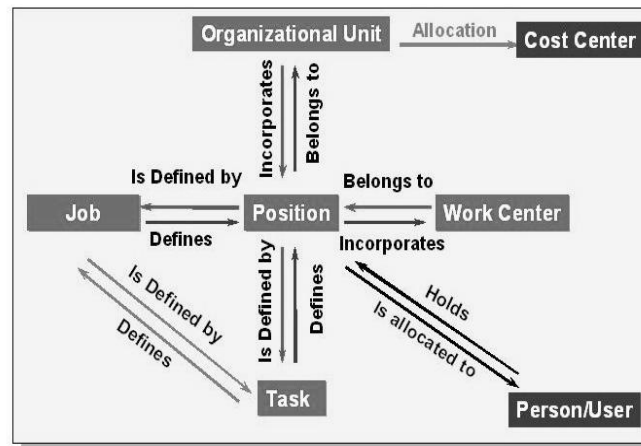


Figure 2. Data Model in Organization management sub module with Relationships

2. Personnel Administration

The personnel management comprises of HR master-data, personnel administration, recruitment and salary administration. The Personnel Administration sub module mainly deals with the personal information of employee. It maintains information and commands for new hires, rehires, status changes, transfers, salary increases, promotions, leaves, and terminations.

It consists of all master data, system configuration, and transactions to complete the Hire to Retire (or, as some say, Fire) process. It includes the following information and processes. Figure 3 shows the typical hire to retire business process associated with the HR module.

- Personnel Management
- Recruitment
- Organization Structure
- Compensation Management
- Personnel Development

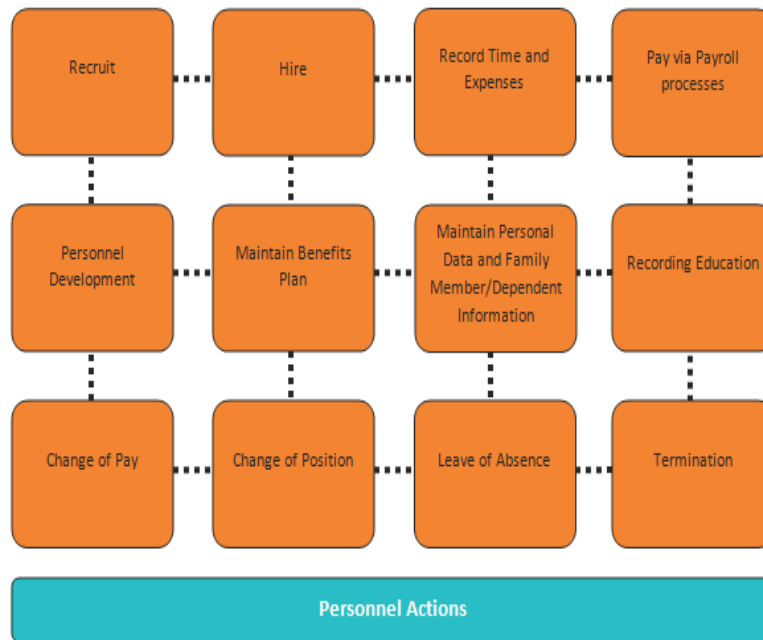


Figure 3. Typical Personnel Management process associated with HR module

3. Time management

Time management includes shift planning, time recording, absence & leave management. The work time module gathers standardized time and work related efforts. In this sub module we can maintain academic calendar and also shift record of employee. Figure 4 shows the time management evaluation process for HR module.

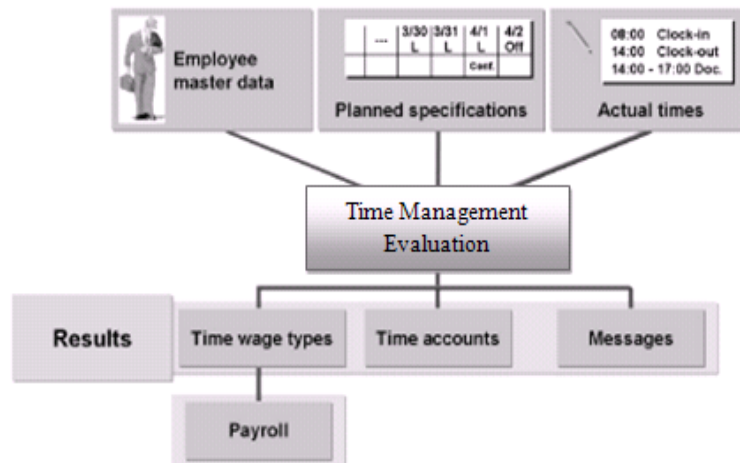


Figure 4. Time evaluation in time management sub module

4. Payroll Accounting

Payroll system includes Salary management, statutory reporting, and attendance management for salary calculation. The payroll module automates the pay process by gathering data on employee time and attendance, calculating various deductions and taxes, and generating

periodic pay cheques and employee tax reports. This module can encompass all employee-related transactions as well as integrate with existing financial management systems [6].

Figure 5 shows the flow chart of HR module for Payroll management.

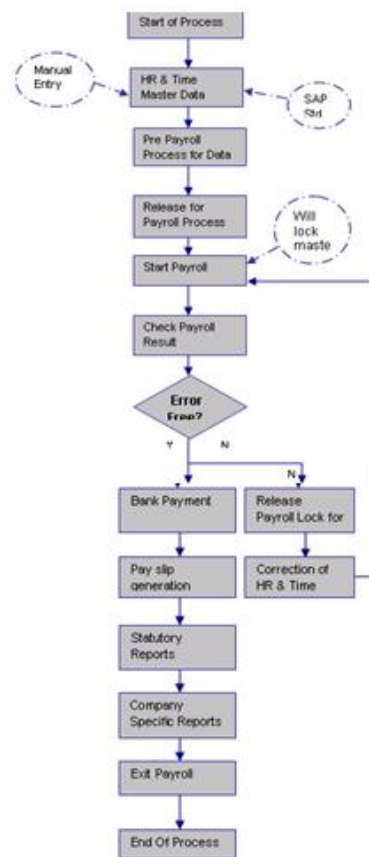


Figure 5. Flow chart of HR module for Payroll Management

Consistent with the overall integration of SAP R/3, the HR module shares information with other modules. The Payroll processes use Accounts Payable functions to print checks, manage payment and bank information, and process payments to tax authorities and other third-party vendors. Payroll results are also posted to General Ledger accounts for use in periodic income and expense reporting.

CONCLUSION

Traditional Information technology systems used by many academic institutes today, they have been developed to accomplish some specific task and provide reports and analysis of events that have already taken place. The ERP system is the best solution for any information system which keeps your systems simple and then builds your system architecture on this base over a period of time.

In today's rapidly changing environment, it is quit necessary for any organization to manipulate their organizational data in real-time so that they can achieve their goal

successfully. This system gives a powerful solution for handling data manipulation in academic institute. Also it helps for achieving their business goals successfully.

The HR module enables employer to effectively manage information about the people in their organization, and to integrate that information with "other SAP modules" and external systems. Implementation of SAP HR module gives simplified process, enhance operational efficiency, minimize the cycle-time involved in transaction processing and ease the work pressure on its staff.

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