

Oracle vs sap: which hr system is right for you?

[Business](#), [Management](#)



Introduction

In current scenario, Information Systems plays an important role in every business. Managing the human resources of an establishment is one of the key challenges faced by the organizations. There are several solutions to manage the human resources that are currently available in the market.

Currently major supermarkets in the UK like Sainsburys, Tesco, ASDA, B&Q etc. uses different HRMS provided by leading vendors like SAP, Oracle etc. which are extremely efficient and also comes at a price. These advanced and efficient systems are not within the scope of upcoming supermarkets and superstores in the UK and in other developing countries which definitely need an efficient, robust, simple and cheaper solution to manage the various core processes that come under the human resources management which include Payroll Management, Time and Labour Management which includes managing attendance, holidays management etc. and finally Employee Self Service. There is a strong need of an application which would integrate all these solutions and provide a single solution with various modules to perform various tasks.

The advent of open source technologies has revolutionized the entire world as it has made some of the most expensive information systems and other software less expensive sometimes the similar systems are available for free. The Employee Management System will be totally built on various open source technologies like Java, JSP, XML and JavaScript which would further reduce the costs to the company and also would make the system available for various categories of supermarkets from large scale to small scale stores.

Initial Research

Human Resource forms one of the vital resources of any organization which is the important driving factor for success of that organization. Managing human resource that human resource efficiently and effectively reduces the costs and increases the productivity. Information Systems which manage the human resources is called Human Resource Management System.

Human Resource Management Systems are “ The systems which provide link between Human Resource Management and the InformationTechnology”.

There are many HRM Systems provided by major vendors like Oracle, SAP Labs, Ascentis etc. which are efficient and robust. These systems have four core modules of a Human Resource Management Systems namely

Payroll Management Module

In this module, payroll process is completely automated. Based on total working hours, holiday pays and tax deductions a specific pay check and tax report is generated for each employee automatically.

Labour and Time Management Module

In this module attendance management and holidays management of employees is taken care of and it calculates the cost of each employee to the company. It provides the company with valuable data about the usage of labour resource.

Benefits Administration Module

The benefit administration module helps the HR department to monitor and manage the employee participation in benefit programs offered by the

company. Benefit programs include health insurance, pension schemes, stock options etc. This module is clearly outside the scope of proposed employee management system because the system is mainly targeted at smaller and upcoming retail stores.

HR Management Module

This module consists of different HR solutions starting for recruitment to retirement. This module assists HR department to manage its human capital pool in an effective manner. It consists of various functionalities like training and development, online recruiting etc.

The initial setup costs and further maintenance cost of these systems provided by popular vendors are expensive and are not affordable for smaller retail stores. Also the smaller and newer retail stores would require just the basic functionalities and a cheaper solution to run within the allocated minimum budget. Hence there is a strong need for an HRMS system which is developed using open source tools and can be made available for free.

Aims and Objectives

Aim

The aim of this project is to develop an information system which integrates different process that are related to Human Resources of a retail store.

Objectives

To research on various processes that are related to human resources of a retail store.

To research on current systems being used for managing human resources

of retail store.

Gathering the requirements for building a system for smaller retail stores.

Designing and Implementing the simple system which incorporates the core modules required in a HRM System.

Testing and Evaluating the system.

Design

An employee management system for a retail store would involve many users like a normal employee, supervisor, team leader, manager, HR manager and a general manager. Some of the most common user roles include an employee, manager, HR Manager, General Manager and an Administrator. The following use case diagrams illustrate the various functionalities provided for different set of users.

The system would be built entirely on model-view-controller design (MVC) where view classes forms the front end of the system, controller classes directs the request and response to appropriate modules based on the type of request and model classes consists of the business logic of the entire system. Employee management system consists of various modules which are basic requirements for any start-up retail store. The following diagram depicts the structure of proposed Employee Management System.

Payroll Module

This module based on attendance and tax deductions automatically generates the pay check at the end of the pay period which can be 2 weeks or 4 weeks or a month depending on the company policies. At the end of the

payment period, employee can view his pay check and HR/Admin can view all the employees pay checks.

Attendance Module

This module keeps track of employee attendance. It allows employee to mark his attendance and also notifies manager and HR if employee takes unauthorised leave.

Holiday Management Module

This module manages all the holidays of the employees. It allows an employee to request holidays and notifies the manager of the same. When manager approves, the shift will be marked paid/unpaid leave depending on the type of leave applied.

Performance Analysis Module

In this module performance of the employee is calculated based on the factors that determine the performance for a particular job role. The factors set aside for every job role depends from company to company and from store to store. There will be a basic framework built for this module and depending on the company it can be customised.

Shifts Management Module

In this module Manager can allocate a shift to an employee which has to be approved by HR.

Some of the user roles of this system at basic level are Employee, Manager, General Manager and HR. The uses-cases are as follows:

Employee Use-Case

Manager Use-Case

HR/Admin Use-Case

REFERENCES

[1] Automatic Data Processing Inc. Available at: <http://www.adp.com/solutions/employer-services/professional-employer-organization/small-business/peo-overview/human-resource-management-system.aspx>
(Accessed: 19-03-2011)

[3] Gui Ying, Tang Bin, Gao Xiao-hui (2009) ' J2EE-based human resources management Information System design and implementation', pp. 20-03-2011.

Appendix

[1] Project Proposal Form

[1] MSc Project Proposal Form

AY10/11, Semester 2

Student Number

1002269

Student Name

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Degree Course

MSc Computers and Internet Applications

Supervisor Name

Rob Manton

Title of Project

Employee Management System

Description of your artefact

There is a strong need for an employee management system which is simple, efficient and free for upcoming retail stores to quicken many processes. Currently many supermarkets like Sainsbury use different HRM solutions provided by major vendors like SAP, Oracle etc. to manage different HR department functionalities which are not within the scope of smaller retailers. The aim of this project is to provide a low cost efficient system which integrates all the necessary functionalities to manage the human resources of the retail store. Some of the main features the system includes are: The system monitors the employees' attendance.

Allows Employee to apply for their paid holidays and check their pay slips.

Provides manager with various functionalities like allocating shifts, approving holidays and monitoring performance.

Notifies manager of any unauthorized absence of an employee.

Allows HR department to add, edit and delete employees and approve holidays.

The artefact will be a web application totally developed using struts framework and will be deployed on a tomcat server. The backend will be developed using MySql Database.

What methodology (structured process) will you be following to realise your artefact?

The entire application will be designed based on MVC architecture where the business logic is separated from the presentation part and hence making the application reusable and customisable to any business. The entire application will be developed using open source technologies. There are 4 modules namely Payroll management, Attendance Management, Holiday Management and Shifts management which will be implemented fully and Performance management modules basic framework will be implemented which can be customised and built based on the business requirements which describes the governing factors for performance. The entire process will be divided into different phases and developed according to simplest software development life cycle model that is waterfall model where entire project is developed linearly starting from requirements gathering & analysis and terminating at maintenance.

How does your project relate to your degree course and build upon the units/knowledge you have studied/acquired

As part of MSc Computers and Internet Applications I have studied various modules like Internet development, multimedia applications, applied programming and Online Database applications which will be helpful in

developing this project.

Resources

Tomcat server, eclipse IDE and MySql database.

Have you completed & submitted your ethics form?

Yes