

DIGITAL CHANNEL FOR RESOURCE MANAGEMENT GROUP PORTAL

P G.Hakke¹, Prof. R V.Mante², Dr. P N.Chatur³

¹ M.Tech[Student], Department of CSE, Government College of Engineering, Amravati, Maharashtra

² Assistant Professor, Department of CSE, Government College of Engineering, Amravati, Maharashtra

³ Head of Dept., Department of CSE, Government College of Engineering, Amravati, Maharashtra

¹ priyankahakke44@gmail.com, ² mante.ravi@gmail.com, ³ chatur.prashant@gmail.com

Abstract— As there are many requests from business units for resources which is a conventional existence in IT industries. They often face workforce management issue with a accountable budget and limited human resources. Resource Management Group Portal (RMGPortal) has been proposed to use within TATA Consultancy Services Limited (TCS) to assign right employee with right skill to the appropriate requirement from the client. RMGPortal will keep tab on outgoing and incoming profiles from the client. It will also help in managing internal as well as external resources and generate management report. Affinity mapping methodology will be used for designing wireframe. User satisfaction is the essential thing for the success of the tool. Wireframe development will be helping for good visual design and resolving user experience related problems. This project will be implemented using standard technologies like HTML5, CSS3, JavaScript, Hibernate and Spring framework.

Keywords— Workforce Management, Profile Tagging, Requirement, Allocation, Background verification.

I. INTRODUCTION

Resource Management Group Portal also known as RMGPortal or Workforce management tool. Workforce management system (WFMS) consist of all the functions which are needed to maintain a effective workforce. Workforce management system is also known as Human Resource Management System (HRM System) or a part of Enterprise Resource Planning system. Workforce management is assigning the right employees with the right skills to the right job. Cost pressure is one major factor due to which managers consider HR issue. In all personnel-intensive industries, workforce management is an important strategic element in corporate management. There are many requirements from the Client, so to fulfill these requirements TCS designed internal tool which is called as Resource Management Group Portal. In Human Resources Management System (HRMS), or Human Resources Information System (HRIS) uses HR systems and processes with information technology.

Traditional system is based on single task like improvement in payroll process. But today there is need to improve process efficiency, correctness and completeness of data, user accessibility, multi location access, reduce multiple spread

sheets across Lob's, role based user access, centralized data, alerts and notifications, integrated system helps in the streamline operations like Background verification (BGV) in which all required documents of the employee are checked, giving allocation to the employee, profile tagging is assigning right employee to the right requirement and generating report.

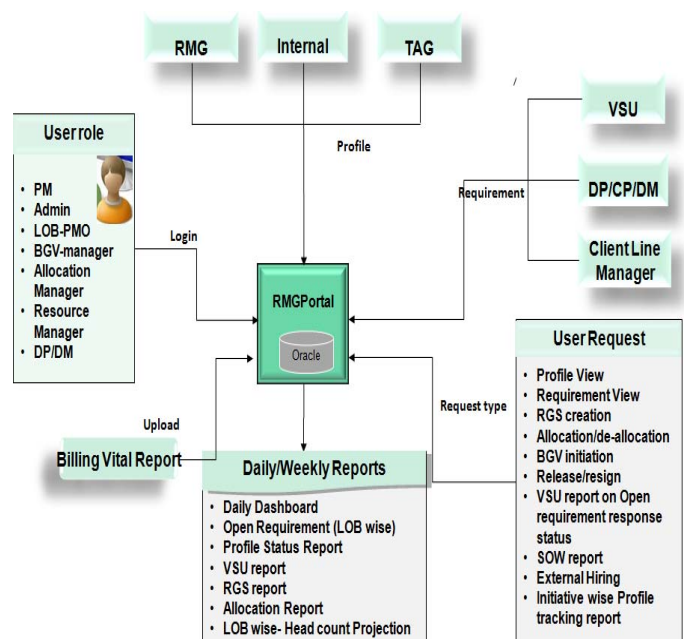


fig1. Functional Overview of RMGPortal

In TCS to help managers to fulfill requirements of client this RMGPortal is developed. fig1. is a functional overview of RMGPortal. Requirements in RMGPortal are come from the client through (Vendor Service Unit) VSU, Delivery Partner (DP) or Client Manager and Profiles come from RMG (Resource management Group), Internal or TAG to RMGPortal. RMG contains database of all profiles. RMGPortal keeps tab on incoming and outgoing profiles from client. In RMGPortal user login is rolewise. User can request for many functionalities like Profile view, Requirement view, RGS Creation, Allocation, BGV Initiation, VSU report on open requirement response status, SOW status, External hiring, upload billing vital report, Profile tracking and to get daily reports.

II. LITERATURE REVIEW

Workforce management refers to the process of managing the workforce supply chain and call for “human resource”. It is assume that the new projects will create demand for workforce and hiring activities to fullfill the requirements So, the workforce management system must consider all the problems regarding the supply and the demand side.

As given in [1], the PMO is always a center for project management knowledge within the company, and it is always used as a resource to support and assist the project managers. The PMO also acts as a resource for the executives of the organization, because they are interested in the benefits that the PMO provides. The main function of PMO are Support, Directing and Controlling.

In paper [2] describes how feature of HTML5, CSS3 and JS will use for RMGPortal implementation. As a number of different platforms used in the development of interactive TV Commercial (iTVC) for Internet connected TVs makes it a complicated process as each platform has its own operating system and application programming interface (API). HTML5, CSS3, and JavaScript are used to create a single interactive ad to targeting different platforms that run on the devices' web browsers ,thus providing cross-platform compatibility. This solution provides several advantages such as universal cross-platform compatibility with a single ad that can be run on all platforms, allowing different input devices to be adapted by simple programming, the HTML5,CSS3 and JS allowing features of TV ad platforms to be reproduced, HTML5 with native video support being a vital feature for an iTVC leaving no need for platform-specific technical skills, personalization of ads, localization.

In paper [3], the main objective of Human Resource Management System (HRMS) is helps to minimize the effort of administrator to keep the daily events such as attendance, projects, works, appointments, etc. This system deals with the process of identifying the employees, recording their attendance hourly and calculating their effective payable hours or days. This system should maintain the records of each and every employee and working hours at the company, which can be used for performance appraisal. Based on that transfer, removal, promotion can be done.

In paper [4], The Human Resource Module for the Intranet Automation of HR Software for an organization provides good communication facilities between employees and the HR Administrator. It allows the HR of an organization to update the details of employees in case of changes in the employee profile. The project aims to create a tool for the HR department which will help it give confirmation to new recruits. The HR department has a CV and record of an employee's Interview in its database. A process known as SWOT is used along with this data to give out confirmations to employees.

In paper [5] explains Workforce Management for preparing staff schedules and assigning agents to these schedules . “rostering” is major issues in call center management. This can be addressed using a new framework that uses simulation based optimization for modeling and solving the agents' staffing and scheduling problems.

In paper [6] explain Workforce and project portfolio management solution is being used by the shared service organizations. It considers the process of allocating, managing and forecasting workforce from a strategic perspective across the organization for customer satisfaction. The tool helps in evaluating the strengths and weaknesses of a service oriented organization.

In paper [7] the Hibernate framework makes use of very little code and simple structure to achieve a persistent object-relational data mapping and lightweight package. The use of Entity Bean is thus avoided along with reducing the complexity of the realization of the process and greatly improving system performance thus reducing the burden on developers.

III. PROPOSED SYSTEM ARCHITECTURE

PM user, Admin user, Management user and Portfolio Manager are main user of RMGPortal. RMGPortal works in intra network of TCS.

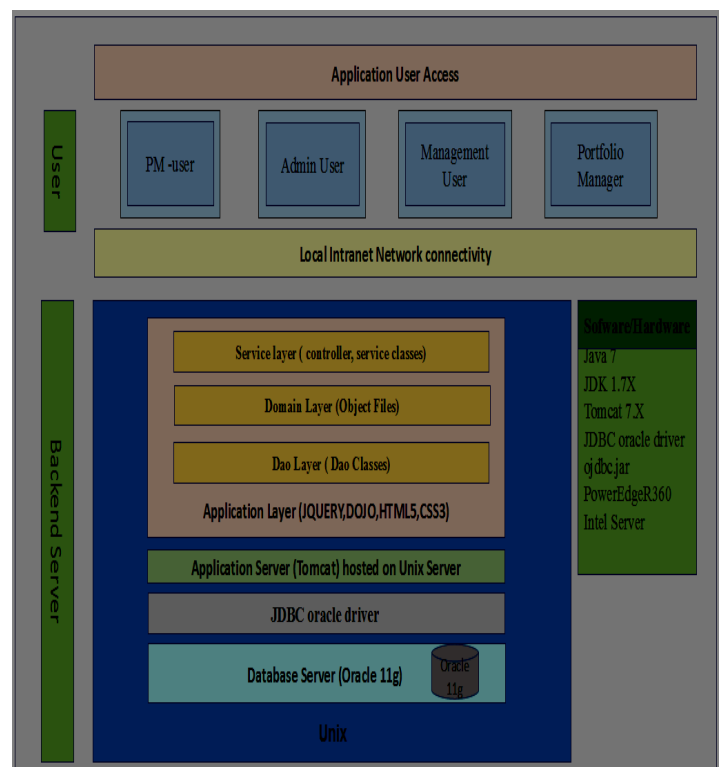


fig2. System Architecture

fig2. is architecture of the system. Request from the user is serviced by the backend server which have Unix environment. Application layer of the backend server contains different layers :

Service Layer - Service layer contain controller and service classes which take username , password and user request as input.

Domain Layer – Domain layer contains all supporting java classes, whose objects created whenever necessary.

Dao Layer – Dao layer contains database connectivity classes. Request from the user first hit the Tomcat (application server) server which is hosted in unix server. Application server process the request and if database is necessary then connection is established with database and data is either fetch from the database and display the result in response by following the same reverse path followed by request or store in the database.

IV. PROPOSED METHOD

User experience is important factor in software development in which user's mentality is studied to design a user friendly product. For an example while using a mobile phone touch screen is more efficient than button. User experience is one of the trend in the industry for any new GUI development which contains following steps:

Contextual Inquiries

Contextual Inquiries is a peculiar type of interview in which data from the users of the system is gathered. It is a one to one interview . The objective is to accumulate as much data possible from the interviews conducted for later research. Interview should result in raw data. In historic interviews, it is sometimes complicated to get interviewees to interview with because they claim that they have no time. In CI, it is actually much easier, because the main part of the interview actually consists of watching user do their work and interacting while they do their tasks.

Contextual Inquiry Analysis

Sample User Statement: Aging is the most important criteria for requirements. Aging means when the requirement is created and when does it expire.

Insight: Every requirement has an aging criteria which determines the priority with which the profiles are to be matched to the respective requirement.

Breakdown: When aging exceeds 100 days, they assume the requirement to be filled or closed.

Affinity Mapping

Affinity diagramming is used to order large quantity of data into different clusters and obtaining consensus on how information should be structured. Interview of PMs, PMOs,

LOB PMO and BGV team is recorded and the each statement of them write on the small chits. All chits get mixed up randomly. All the user statements were noted down and analyzed. These statements, their breakdowns, analysis and the design ideas were then taken in for an Affinity Mapping. The groups created at the end of each Affinity Mapping was written down in an excel along with the solution/ design idea related to those concerns.

Card Sorting

Card sorting is a method in user experience design. It is used to guide users to generate a category tree. Information architecture, work flows or website navigation paths are designed using this technique. Card sorting has a characteristically low-tech approach. Simple index cards or Post-it notes are used to write the identified concepts. These are then arranged by the user group to represent the groups or structures they are familiar with.

Hence at the end considering view and feedback of each user group and subgroup arranged in a hierarchical order and got the information architecture. This information architecture helps in designing wireframes. Wireframe is a design of the screen which mention how much data should visible to the used and where it should place. Wireframe designs will be implemented using standard technology like HTML5 , css3, javaScript which basically useful in cross-platform. Hibernate technology is useful for fast access of data in database. Spring framework will use in implementation of RMGPortal.

V. CONCLUSIONS

RMGPortal architecture helps in employee onboarding process which reduces efforts of Managers at TCS to assign right employee with write skill to the right requirement of Client. RMGPortal efficient tool to generate the report and also minimize the use of excel sheet for employee data collection. Affinity mapping method used in designing of wireframe which helps to solve user experience related problems.

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