Human Resource Management System

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Abstract: Human resource management system plays vital role in any institution. It mainly focuses on people in the institution. It is concerned with hiring, motivating, salary generation, yearly appraisal, promotions, attendance management and storing employee details .It is also concerns with employee and management data. The problems in existing systems are they are time consuming, expensive ,loss of data, no in time reports and requires manual calculation.

INTRODUCTION

A Human Resources Management System is a software application consolidating a variety of human resources duties into one package, such as performance analysis and reviews, recruiting and hiring, and payroll and benefits administration.

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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. Data is generally fed from the human resources and timekeeping modules to calculate automatic deposit and manual cheque writing capabilities. This module can encompass all employee-related transactions as well as integrate with existing financial management systems.

The time and attendance module gathers standardized time and work related efforts. The most advanced modules provide broad flexibility in data collection methods, labor distribution capabilities and data analysis features. Cost analysis and efficiency metrics are the primary functions.

1.1 The advantages of human resource management system are as follows:

1. Easy access to the data
2. The new system is more user-friendly, reliable and flexible.
3. Data alteration is easy.
4. Maintenance of the project is easy.
5. Reduced manual work.
6. Timely Report generation.

The main objective is to reduce the effort of administrator to keep the daily events such as payroll, employee performance, and employees' details. The objectives are as follows:

1. Employee Details.
2. Payroll.
3. Performance.
4. Attendance management.

Fig 1: Overall scenario of HRMS

1.2 Employee Details

Employee Details Employee Details module is used to maintain the employees' details such as adding new employee, modifying the existing employee and deleting the existing employee. When a new employee is selected from the resume tracking, all the details are to be entered and maintained in the database.
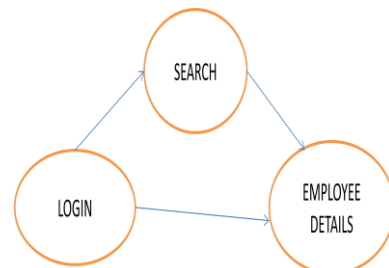

Fig 2: Overview of employee details

1.3 Payroll

In the payroll module, it consists of the information about the employee salary details such as basic pay, allowances, deductions and calculate the gross pay and net pay from the given allowances and deductions.
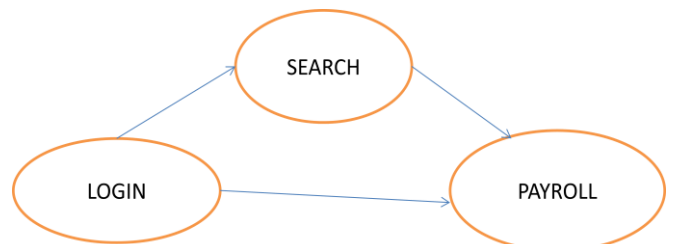

Fig 3: Overview of payroll

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1.4 Performance

This performance module contains information about the employee's current position in the organization. This module has the information such as employee name, employee ID, Division, work group, evaluation date, evaluator, and evaluation period. This module is used to monitor the employees, their work performance and the involvement of them in the organization.
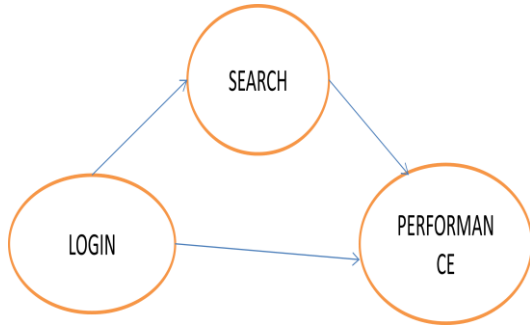

Fig 4: Performance of employee

1.5 Leave Management

This module contains the information about the employees leave details. There are three kinds of leave which are sick leave, vacation, and holiday.

There are fixed amount of days that are allocated for each type of leave and the database of leave details are maintained by the organization. The details includes number of days, period, total number of leave taken by that employee upto that date and number of days that are remaining.

SCOPE OF THE PROJECT
1. Employee hiring – Recruitment and selection.
2. Yearly appraisals – Based on performance.
3. Remunerations – Compensation and rewards.
4. Maintenance – Personal and professional details.

LITERATURE SURVEY

Manual system:

Existing system is manual that is use of pen and paper to calculate salary. Storing the details of employee is manual that is they are stored using paper.

Semi automated system:

In some institutions they are using semi automated system for generating salary of employees but they don't have the facility of adding new details.

Automated system:

Automatic salary generation and recruitment. Some institutions are using automated system for generating salary of employees.
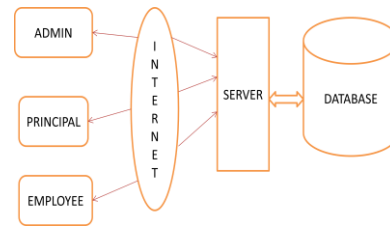
METHODOLOGY

Fig 5: Figure shows the overall methodology of HRMS

The methodology consists of admin, principal, employee, server and a database.

Admin has the ability to view all the details of employee and can access employee details.

Employee can view his details and update the details both professional and personal details. Personal details include his name, address, contact number, education qualification. Professional details include his salary, date of joining, designation etc.

Principal or HR manager can access the employee details.

The database is used to store the employee's data in a structured way. The data may be both personal and professional details of all the employees in an institution.

Error messages

Invalid user ID:

When any user enters invalid username or id or password then invalid user id please enter correct username message will be displayed. The user will get another chance to enter username or user id and password.

Failure message on insufficient data:

When there is insufficient data in the database of an employee, when admin tries to access that data which is insufficient, the error message will be displayed.

Negative salary:

The salary should not be in negative values. If suppose in case the salary entered is negative then the error message negative salary will be displayed.
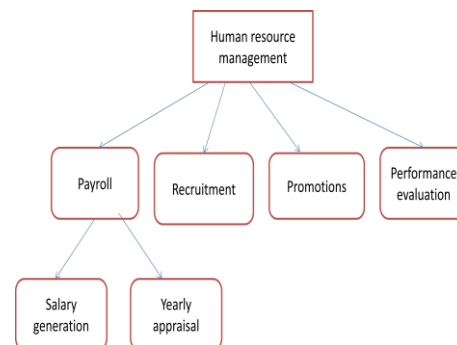

Fig 6: Different modules of Human Resource management System

PAYROLL:

Payroll refers to the administration of employees' salaries, wages, bonus and netpay. Payroll consists of salary generation and yearly appraisal. Yearly appraisal will be done based on the performance of the employee.

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PROMOTIONS:

Based on the performance of employee promotions will be given to the employee. Promotions may be in the designation, bonuses or rewards.

PERFORMANCE EVALUATION:

It's the systematic way to examine how well an employee in performing in his or her job. It is a way to satisfy employee as to how well they are performing in their job. It can also be used as a tool to develop employees. It can also provide a basis for promotions and increments.

RECRUITMENT:

It is a process of identifying and hiring the qualified candidate to a job vacancy.

MODEL

The incremental model is used to develop the project. The software is developed by taking one module at a time incrementally. In this first module is used to store the employee details like personal and professional details. The second module is used to store payroll that is salary and yearly appraisal. The third module is used to store attendance management.

It speeds up the progress of development of each functionality. Each functionality is delivered to the end user one after the other. First increment is always a base feature and other features are added in the next increments.

If any errors are detected in the first module, they can be corrected in the first module itself and can be avoided in next increments.

Advantages of this model is as follows

1. It is easy to test and debug.
2. It is more flexible.

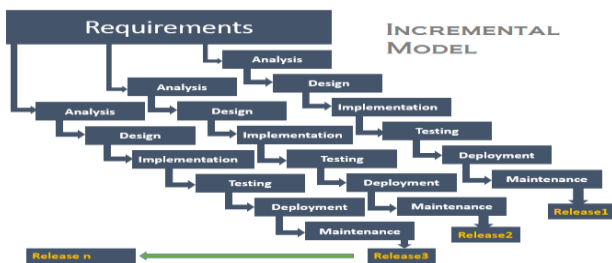The disadvantage is that it is expensive when compared to waterfall model.

CONCLUSION

Human resource management should be seen as a strategic function of an organisation it helps to build a compitative edge for an organisation by positively engaging it's employees. Recruitment and selection methods are very important in concerning the right candidate for a job. Hrms consists of different modules those are managing payroll maintaining attendance and leave records by allowing employees to update personnel information and perform other tasks, informatiom is kept more accurate.

REFERENCES

[1] S Uwizeyemungu, L Raymond- Journal of information " Essential characteristics of an ERP system" 2005
[2] W Yong, N - "ERP on enterprise management" 2000
[3] RHRM Aernoudts, EGJ Vosselman" Management accounting change and ERP, an assessment of research" 2005
[4] A Trapped, PS Ho- industrial management and data system " Human resource management system" 2002