

Management Information System for a Small and Medium Business Firms

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Introduction

Nowadays in every businesses using computer based applications to increase the quality of work and time efficiency. In order to improve the before mentioned areas, accuracy, reliability, security and speed of works has to be increased, if the particular business has to win the competitive business (OrangeHRM , 2013). In other words, dependency on human effort has to be reduced or new technologies have to be implemented.

In nowadays customers and employees have faced so many problems due to the manual system for day to day transactions. Through the current system there is no perfect Management Information System to do day to day transactions in an own Sri Lankan context. Any off the sales packages do not implement to Sri Lankan context and those are focusing only on larger business. Therefore they need to spend more time to learn and there will be unnecessary modules and functions to small business. That time they lost their time, money and work. So this system gives a solution for them.

There are many businesses in the Sri Lanka which handle transactions at the same time. The every country business use different data handling mechanism to manage all the business related data (Technocity, 2008). The security and time are the major issues to be considered at such situations. As a solution, Management Information System has taken a very important part. To increase the efficiency of business transaction and managing mechanism with the existing system a dedicated system is needed to be implemented. So my system has done to fulfill all those expectations.

This system is basically its handle Human Resource management, Inventory Management, and e-commerce transactions with JAVA, PHP application and responsive website technology rather than the currently existing normal website. This System is a desktop and website application that is built to small business activities. This system is capable of managing Human Resource functions, Inventory functions and E-commerce functions. Some of the special features of this system are able to send email through JAVA desktop application. The system is responsive to mobile and tab devices and all browser support.

Methodology

This system was created according to the user levels. Super administrator can access all the functions of the system. But, Administrator can only access their limited functions. There are three administrators who are Human Resource administrator, Inventory administrator, and e-commerce website administrator. And another user level that is Employee who can login this system and can access their profile related data. The payment system is working based on PayPal sandbox. These all functions are working based on centralized database.

The Human Resource, Inventory, Super administrator control are created using the Java, and website is created using PHP, HTML5, CSS3, and Bootstrap API. The email part is done by PHP Mailer in e-commerce website and JAVA Apache http client library for JAVA applications. iReport, jChart, jasper report, and pChart are used for create graphs and pdf reports. The database is created in MySQL using Wamp server.

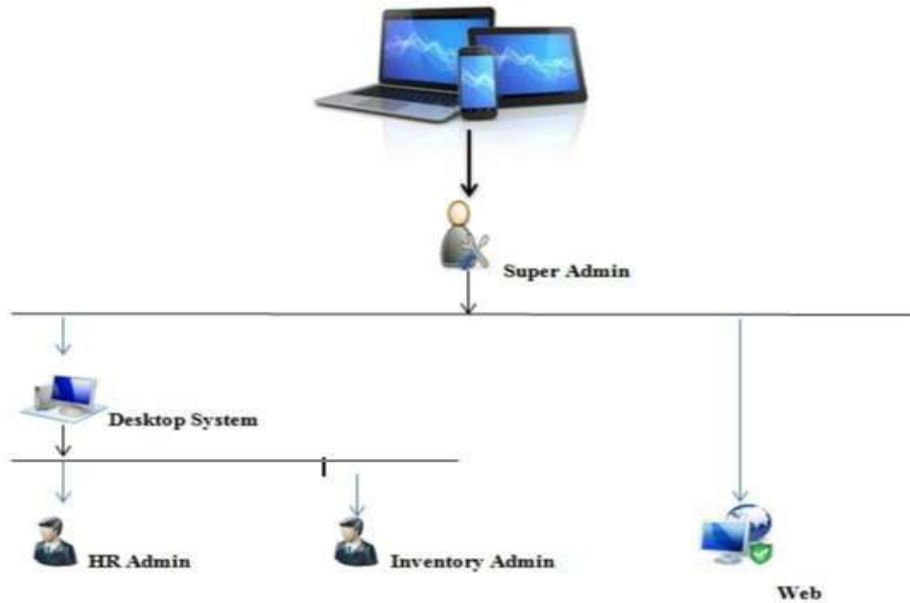


Figure1. Implementation Diagram.

Results and discussion

Following features were identified to be included in this Management Information System as a solution.

1. Reports: to take strategic decision, Administrator can create reports where necessary. Report can be getting as many formats such as pdf, MS Word and etc. Therefore, it is very useful to managers. All functional group managers can create reports regarding their department activity information. But super administrator has the ability to get all functional group reports to make decisions and take those details as files.
2. Graphs: this is the very important feature of the system. All graphs can be got from here. This all department graphs can access by super administrator. Other administrator can only access their department graphs. These graphs are help to take decision about their business. Graphs summarized the business activities according to day or month or year. Therefore, decision makers can make their decisions by using this system and can make strategy.
3. Human resource management: it is all about Human Resources functionalities. All human resources functions can be done by using this module. This include payroll system, employee management, recruitment, performance analysis, attendance management and training plans.
4. Inventory management: the system can do all the inventory management functions. Those are current stock, orders, invoices, suppliers and many more.
5. E-commerce website: this module is regarding online sales. This website can do the following functions. Those are online sales, feedback, online recruitment, online enquiry and more.

Conclusions

This system is a Management Information System that supports any day to day transaction activities. This system can be considered as solution for security aspects, accuracy, flexibility and time consumption aspects of tedious manual process.

All the users can access with their user credentials. User levels are defined like human resource admin, inventory admin, e-commerce admin, and super admin and employee user levels. By using this system, administrators can create reports and graphs to take strategic decisions.

Therefore this can be considered as an all in one solution for managing information at small and medium business organizations.

References

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