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Abstract

INTELLIGENT HUMAN RESOURCE MANAGEMENT SYSTEM

by

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Human resource management (HRM) becomes more and more important to an enterprise in the new century. Successful enterprises not only have a good CEO, but also have a good HRM department. Current society is an "IT" society, many Human resource management systems (HRMS) have been developed and used in HRM. In spit of it, some problems are also left over. How to improve the current HRMS and develop a new HRMS with advanced technology is inevitable. Data mining, which is good at finding mode from data, has been applied in many fields and obtained good economic results. This is a new method.

In this thesis, it will concentrate on the improvement of the current HRMS. A new HRMS will be implemented with data mining technology and it can offer the forecast, analysis, decision-making functions. In HRM area, integrating data mining into human resource management is a new attempt. And with the help of the new technology, the manager can make a more correct decision than before. The designing and development of HRMS is base on South China Normal University. An I_HRM System will be designed, and the data mining system is a subsystem of it. The main data mining algorithms such as decision tree, tree pruning and association rule will be used in this

intelligent system. Besides data mining, the I_HRM System can offer the basic functions such as adding, editing and searching to the records in DB. And it will also provide the function to compare the perpruning and postpruning algorithm in processing decision tree.

There are four chapters in the thesis, the main content are as follows:

The first chapter points out the research content and reason. At first, I analyze present situation, important function and managing contents of human resource management. Then, point out some shortages. Secondly, it is put forward of the application of data mining in human resource management.

The second chapter mainly analyzes data mining. Select decision tree method to realize after learning data mining concept, model and classification. Then, explain decision tree method and improve it for human resource management.

The third chapter is the design process of I_HRM system. It is clouds that whole structure design, subsystem design, function design, database design, interface design, module design and code design so on.

The fourth chapter introduces the operation of I_HRM system, and test with a group of data. Then, analyze its result and draw a conclusion.

Key words: Human Resource Management; Data Mining; Decision Tree; Association Rule; Tree Pruning.