

A Study of Applying Data Mining Techniques on the Influence of Entrance Paths and Student's Background on Student's Acad

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ABSTRACT

In the past years, the ways of recruiting new students of university are only based on past experiences, on which the maximal utility cannot be reached. Hence, it is a very important issue for how to recruit the most suitably new students subject to the limited quota of multi-channel entrance program. In recent years, data mining techniques have been applied to many domains and there are a lot of successful applications in various industries. However, the work of application on education industry is rare. For an ever- and stably- increasing quantity and completely holding of student data, it will be useful for developing the strategies of recruiting new students and other relative activities if the data can be effectively analyzed. In order to understand whether the learning per-formances of the enrolled students in Dayeh University are related to their entrance channels, so we can develop the strategies of recruiting new students. Therefore, the objectives of this study are two. The first is, by applying the technique of data mining, we try to explore all potential knowledge such as the possible reference table of per-formances among different channel of entrance students and the relationship of the learning performances of the enrolled students in Dayeh University among different en-trance channels. Based on these analyzed results, are developed. The second is to for-mulate a mathematical programming model to find the best ratios of the different chan-nel of entrance students and the strategies of recruiting new students.

Keywords : data mining、 online analysis process、 decision trees、 knapsack problem

Table of Contents

中文摘要	iii
英文摘要	iv
誌謝辭	v
內容目錄	vi
表目錄	viii
圖目錄	x
第一章 緒論	1
第一節 研究背景及動機	1
第二節 研究目的	2
第三節 研究流程	3
第四節 研究架構	3
第二章 文獻探討	4
第一節 學生背景對在校成績影響之文獻	4
第二節 資料倉儲	4
第三節 OLAP分析	5
第四節 決策樹與規則歸納	6
第五節 背包問題	6
第六節 演算法	7
第三章 研究方法	8
第一節 資料分析範圍	8
第二節 資料前處理	8
第三節 招生資料倉儲之建置	10
第四節 OLAP規劃	11
第五節 決策樹分析	12
第六節 背包問題	13
第四章 資料分析與研究結果	14
第一節 敘述性統計分析	14

第二節	OLAP分析	18
第三節	決策樹分析	38
第四節	背包問題	43
第五章	結論與未來研究方向	47
第一節	研究結論	47
第二節	未來研究方向	48
參考文獻		49

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