

基於「知識管理」檢討資訊管理系統之發展

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摘要

雲林縣政府於 2003 年開始陸續推動知識管理系統，提供文件儲存與檢索、電子表單、公告系統等功能。雖然資訊系統大部份都會留存使用行為紀錄，然而在雲林縣政府推動知識管理系統的過程中，使用者或相關系統的分析研究卻付之闕如，因此本研究整合 Proxy 紀錄檔與員工資料檔，以發掘知識，提供擬訂相關資訊系統發展政策。

本研究的主要貢獻在於首次整合分析層級程序法 (Analytic Hierarchy Process) 及資料探勘 (Data Mining) 技術，將其應用在政府相關資訊系統的評估。本研究利用分析層級程序法以取得各系統之貢獻權重，並利用相關權重，結合資料探勘方法，以評估雲林縣政府內使用知識管理系統的員工。資料探勘所採用之演算法分別為 K-means 演算法及決策樹 (Decision Tree) 演算法，所分析之系統重要性及員工資料結果，將可提供雲林縣政府擬定新的資訊系統發展策略。

關鍵字：分析層級程序法、顧客生命週期價值、資料探勘、知識管理、雲林縣政府

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The Assessment of Information System Based on Knowledge Management : A Case Study for Yunlin County Government

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ABSTRACT

Since 2003, The Yunlin County Government starts to use a knowledge management system for document retrieval, electronic form and announcement systems etc. Most of the information systems can provide the information of user behavior by analyzing user's logs. However, while Yunlin County Government promotes the knowledge management system, the related analytical research of the date of users' background and users' logs are yet still lacking. Therefore, the research employs data mining techniques to analyze proxy server records and employee's data, and thereby to excavate the information of employee's behavior of using the system. As a result, managers of the Government can refer the results to make appropriate information system management policies for the employee in the Government.

This research proposes a novel technique which simultaneously employs the Analytic Hierarchy Process and the Data Mining in order to specify the staff who frequently use the system in Yunlin County Government. Furthermore, we take advantage of the Analytic Hierarchy Process to find out the weighting of Information System, and combined the Data Mining with the purpose of revealing the user's behavior. Finally, the weighting exposes the significance of Information System, also, the mining results provide the knowledge of system's user behavior for manager to make strategies for Information System.

KEYWORDS: Analytic Hierarchy Process, Customer Lifetime Value, Data Mining, Knowledge Management, YUNLIN County Government

