# 大學圖書館相對效率與標竿學習之決策分析

謝玲芬,林岳民,吳牧臻
科技管理學系
管理學院
lfhsieh@chu.edu.tw

## 摘要

The university library plays an important role in Taiwan. From the past six months, the global financial crisis has lead many private enterprises and government sectors start to actively adopt measures for cost down which have impacts on the funding of the education units including the university libraries.
. Therefore, the university libraries must develop their unique characters and enhance their irreplaceable natures. DEA enables all the inputs and outputs of decision-making units to project on the geometry space to draw the efficient frontier to find out the relative efficiency of decision-making unit. This paper applies DEA-CCR input-oriented model to calculate the relative efficiency of the university libraries. The library staff, volumes of books, electronic journals, floor space and equipment costs are treat as the input factors. The number of books returned, operating time, and the numbers of electronic resources utilized are treated as output factors. In addition, the cluster analysis is also applied in this paper for the development of the group's characteristics. The features of different clusters include high utilization rate, the length of library open time, the facilitate of information acquired, and general cluster. And then, the benchmarking library was selected as reference for making improvement. This study not only identifies the characteristics of the university library but also provides suggestions for improvements.

關鍵字：Data Envelopment Analysis (DEA), Relative efficiency, Cluster Analysis, Efficiency decomposition