## 系統整合業之經營績效評估模式

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### 摘要

本研究以資料包絡分析法(Data Envelopment Analysis, DEA)針對2005年到2006年間系統整合業之上市上櫃公司業績進行實證分析,經由多階段投入導向CCR以及BCC模式分析來探討各別的營運績效之優劣,並透過差額變數分析作為該公司績效改善之參考依據。此外,運用敏感度分析來探討不同投入和產出的變數組合,探討其是否對效率會產生重大的改變,進而瞭解各個變數對於績效之影響。研究結果發現:1. 整體而言28家系統整合業之獲利與營運效率不佳,過半數公司需透過調整經營策略以及改善投入比來增加獲利的能力。2. 經由差額變數分析法得知,在眾多公司的營運績效中急需改善之變數為固定資產。3. 透過敏感度分析發現,營運成本為最敏感的投入變數。4. 生產力分析結果顯示,其中15家公司呈現改善狀態,而剩餘13家則為衰退狀態。

### 【關鍵字】系統整合業、經營績效、資料包絡分析

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# The performance assessment model of System Integration

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#### **ABSTRACT**

This study applies the method of Data Envelopment Analysis (DEA). We conduct a positivistic analysis of the performances of companies of System-Integration industry listed OTC between 2005 and 2006. The multi-stage investment-oriented model of CCR and BCC are used to discussed the merits of other operating performance. The differences between variables of the company's performance are considered as a basis for improvement; In addition, the use of sensitivity analysis to explore different inputs and outputs of the combination of variables; to explore whether or not its produces bring out a major change; to understand all the variables affecting the performance. The results showed: 1. Overall, 28 of the System Integration and operational efficiency of poor earnings, the majority of companies need to adjust business strategy through and to improve the investment ratio to increase the capacity of profit. 2. Through the analysis of variables differences we realized that, among many companies' operation achievement, the variable of fixed assets requires urgent improvement. 3. Through the sensitivity analysis, we found that the operation cost is the most sensitive input variables. 4. Productivity analysis revealed that, 15 companies showed improvement, and the remaining 13 are in the state of recession.

KEYWORDS: System Integration, business performance,

Data Envelopment Analysis (DEA)