

題目	半導體設備供應商競爭優勢之研究
作者	蔡榮發（國立臺北科技大學經營管理系教授） 黃春華（國立臺北科技大學經營管理系博士生） 朱苡瑄（國立臺北科技大學經營管理系碩士生） 曾婷廷（國立臺北科技大學經營管理系碩士生）
摘要	設備在半導體製程中，除了設計，在製造、封裝和測試皆需要設備輔助，而設備的投資占半導體總資本支出之大宗，可見半導體設備產業在半導體產業供應鏈中具有相當重要的地位，而台灣是全球最大半導體設備市場。本研究以半導體設備供應商為對象，探討半導體設備供應商的競爭優勢關鍵因素，首先透過文獻探討，根據不同學者建立的關鍵因素架構進行統整以建立初步架構，再以修正式德爾菲法進行專家意見彙整，建構評估模式。接著運用決策實驗室法為基礎的網路程序分析法，找到影響半導體設備供應商競爭優勢的關鍵因素。研究結果能提供半導體設備供應商未來經營發展之參考。
關鍵字	半導體設備供應商、修正式德爾菲法、決策實驗室法為基礎的網路程序分析法
Title	A Study on the Competitive Advantages of Semiconductor Equipment Suppliers
Author	Jung-Fa Tsai, Chun-Hua Huang, Yi-Hsuan Chu, Ting-Ting Tseng
Abstract	In the semiconductor manufacturing industry, equipment is required in manufacturing, packaging and testing processes. Equipment investments account for a large proportion of total capital expenditure, and the semiconductor equipment suppliers play an important role in the supply chain of semiconductor manufacturing industry. Taiwan's semiconductor equipment market is the largest in the world. This study aims to explore the key factors of the competitive advantages of semiconductor equipment suppliers. This study firstly integrates the key factors of how the semiconductor manufacturing companies select their equipment suppliers from the literature and utilizes the revised Delphi Method with expert opinions to obtain a set of consistent criteria for further evaluation. Then the DEMATEL-based analytic network process is utilized to find out the key factors that affect the competitive advantages of semiconductor equipment suppliers. The analysis results could be a practical reference for the related industries and academia.
Keyword	Semiconductor Equipment Suppliers, Revised Delphi Method, DEMATEL-based Analytic Network Process.