中文摘要

本研究探討新聞網絡對企業營運績效的影響，特別關注半導體供應鏈位置和社會網絡圖的角色。在複雜的數位化商業環境中，新聞報導可能影響企業營運狀態。研究以臺灣半導體產業 81 家上市公司為對象，利用 2020 至 2023 年的網路財經新聞數據，評估供應鏈位置與運營績效的關係，並探討新聞報導的影響機制。本研究綜合運用斷詞分析、情感分析、社會網絡中心分析和資料包絡分析等方法，針對企業營運績效進行綜合分析及預測。

結果顯示，單獨考慮財務數據不足以充分反映企業真實狀況，負面新聞對企業有深遠影響，具較高預測價值。此外，社會網絡圖中的信息傳遞對提升營運績效具有重要意義。本研究通過社會網絡圖的價值分析，協助管理層更深入地理解信息環境對企業營運績效的影響。數據分析深入挖掘了動態網絡如何影響供應鏈位置、社會網絡圖與營運績效的關聯性，為企業管理提供了更深入的理解和實際應用的建議。

關鍵字：文字探勘、社會網路、營運績效、資料包絡分析

ABSTRACT

This study explores the impact of news networks on business performance, with a particular focus on the role of semiconductor supply chain locations and social network diagrams. In a complex digital business environment, news coverage can affect the state of business operations. This study uses online financial news data from 2020 to 2023 to evaluate the relationship between supply chain location and operational performance of 81 listed companies in Taiwan's semiconductor industry, and explores the impact mechanism of news reporting. In this study, we comprehensively use word breakdown analysis, sentiment analysis, social network center analysis and data envelopment analysis to comprehensively analyze and predict the operational performance of enterprises. The results show that considering financial data alone is not enough to fully reflect the true situation of enterprises, and negative news has a far-reaching impact on enterprises and has high predictive value. In addition, the transfer of information in the social network diagram is of great significance to improve operational performance. Through the value analysis of social network diagrams, this study helps management to better understand the impact of the information environment on corporate performance. The data analysis digs deep into how dynamic networks affect supply chain location, and the correlation between social network diagrams and operational performance, providing a deeper understanding and practical application suggestions for enterprise management.

Keywords：Text Mining, Social Networks, Operational Performance, Data Envelopment Analysis