

應用模糊計劃評核術於供應鏈管理決策分析之研究

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摘要

在全球化競爭的壓力下，企業除了要具備高品質的產品開發、製造及多樣且快速的產品設計能力外，更重要的是能快速反應市場的變化，滿足消費者的需求，提高企業的競爭力。因此，回應市場變動的能力與速度已成為在激烈競爭環境中的致勝因素。然而，供應鏈體系的運作流程常缺乏足夠的透明度，每個成員的前置作業時間常常因為內外環境變動的影響而不易精確掌握，進而影響整個供應鏈體系的運作績效。為此，本研究結合模糊理論與計劃評核術，提出一個供應鏈流程的管理決策分析模式，以進行計算供應鏈體系運作流程的週期時間，分析履行顧客訂單的能力，進而考量時間與成本參數，並以此分析模式為基礎構建一個供應鏈管理決策評估系統，提供企業在決策時參考。藉由系統模擬結果發現，本研究所提出的分析模式，可有效掌握每個成員影響供應鏈體系運作的關鍵程度，整個供應鏈體系網路結構的關鍵要徑，以及分析供應鏈體系履行顧客訂單的能力。進而，可清楚定義每個成員在不同趕工時間下所產生的趕工成本，有助於供應鏈體系進行資源的規劃與調整，並在互信合作的理念之下訂定合作策略，以達到供應鏈體系成員願意共同均擔成本與共享利潤的最終目的。

關鍵詞：供應鏈體系、模糊理論、模糊計劃評核術、前置作業時間

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