摩胡理論應用於決策最佳化之研究

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摘 要

決策評估對於一企業是否能永續經營扮演著極重要的關鍵因素，然而決策的好壞也將直接或間接影響企業對一重大案件執行的成敗結果。雖然資訊科技對企業執行企劃案的工作流程、資源分配等執行效率的提升是無庸置疑，然而對於企業決策的影響，例如：決策品質的提升以獲取競爭優勢等，卻不如期望中的理想。決策過程往往面臨著認知的差異和對問題存在的不瞭解等因素，進而導致決策的失敗。如何找出一方法，讓決策者可以針對決策結果較差的案例進行適當的修正，是現今研究的熱門話題。 有鑑於企業經營環境詭譎多變，所面對問題的難度與複雜度亦隨之增加，管理資訊系統卻難以提出有效的解決方案，例如：對於資料量少的案例分析無法正確的評估、受訪者可能存在對問題的認知差異等等。因此如何有效地整合先進的資訊技術，並搭配適當的決策模式，以彌補現有管理資訊系統在分析預測能力上不足之處，並藉此協助企業提昇經營優勢，是當前管理環境應待突破之處。 本研究的目的將針對以上的問題進行解決，提出可靠性的決策方法，以供決策者處理決策問題，並找出可靠的評估依據。 本研究提出決策最佳化的方式，暨改良三種理論方法：灰色關聯分析法(Grey Relational Analysis)、模糊層級分析法(Fuzzy Analytical Hierarchical Process)以及變異係數(Coefficient of Variation)，成為模糊決策分析法(Fuzzy Decision Analysis)。透過層級架構，預先收集「問卷數據」以及「專家學者意見」等因素，利用「模糊決策分析法」來進行分析。藉由變異係數來對標準偏差作預測，讓決策者可以適當修改其決策方案，以增加決策效率，並降低其成本，進而滿足決策最佳化之需求。

關鍵詞 : 灰色關聯分析、模糊層級分析、變異係數、決策支援系統

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