전략적 경영계획수립을 위한 인공신경망 의사결정지원 시스템

(Connectionist DSS for Strategic Planning)

이 건 창

경기대학교 경영정보학과

Abstract

This paper aims at designing a connectionist DSS for building a strategic planning, one of highly-unstructured decision problems. Main body of the connectionist DSS, abbreviated as ConDSS, consists of a large number of neurons (or nodes) and hierarchical layers, showing several features compared to conventional DSS: robustness, graceful degradation, and learnability. Robustness helps guess an approximate solution when faced with unknown situations. Graceful degradation prevents the ConDSS from being inoperative due to some errors in programming codes or models. Learnability enables the ConDSS to extract regularities or rules from given data or situations, providing a useful vehicle of automatic knowledge acquisition. The ConDSS is extensively applied to solving a strategic planning using three methods such as BCG matrix, Growth/Gain matrix, and GE matrix. The problem is to suggest the best strategic planning for a specific situation by integrating the results from those three matrices. The goal of this experimentation is to show how the ConDSS works in such a complicated situation. Its design and implementation is described with an emphasis on comparing with that of conventional DSS.