Abstract

In this paper, a systematic approach is used for sale prediction in a multistoried retail business with the help of multi sensor data fusion technique using Neural Network and Fuzzy Logic. This method can better solve problems existing in traditional sale prediction which are basically depends on the personal experience. In this work a 3-layers data fusion structure is used. In this system, the sale data experiential characteristic and the sale data-fitting characteristic are fused by fuzzy inference system to get sale prediction. After using the Feed Forward Back Propagation algorithm, the system is trained for predefined target value and then the system calculate the sale statistic in runtime which is fused with the data of expert databases using fuzzy logic technique.
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Index Terms

Computer Science  Fuzzy Systems

Keywords

Radio Frequency Identification (RFID), Data Fusion, Artificial Neural Network (ANN), Fuzzy Logic Technique.