

A STUDY ON FUZZY DECISION AND PREFERRED ENTERPRISE STRATEGY

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Received May 2008; revised September 2008

ABSTRACT. *Deciding on an enterprise strategy is often a tedious and difficult process. Although the topic in this paper has been extensively studied in the past by many researchers, this paper uses a different way of thinking to further improve the technology; the paper's view is explained in later sections of the paper. Regarding enterprise decision method, this paper shows its organization strategy and plan estimate is generally carried out using group decision method. The decision-making team shares their opinion based on their limited information and experience, and then assesses the feasibility of the plan. Hoping to efficiently and systematically create and decide on a strategy in a fuzzy environment, this study combines the opinions of various expert decision makers so as to analyze the similarity between the expert's fuzzy assessed values, and combine the fuzzy assessed values of all experts. Normally, decisions are analyzed manually, which is time-consuming as well as inadequate. The primary object of this paper is to study fuzzy enterprise decision-making. This work analyzes quantitative and qualitative objectives and strategy factors of decisions with the help of a reformed fuzzy decision-making system. Quantitative objectives are factors like annual turnover and financial condition of an enterprise. These are obtained from explicit data. Other factors like size of the distribution company, the market competitiveness, etc, are known as qualitative objectives. This study obtains the optimal decision through analyses of all quantitative and qualitative factors.*

We shall explain the theory of our proposal and demonstrate it through an example. The example demonstrates how an electronic parts manufacturer can select its distributor by applying our fuzzy decision-making method.

Keywords: Multi-objective system, Qualitative objective, Quantitative objective, Fuzzy decision-making

1. **Introduction.** Enterprise management strategies give rise to quality decisions and competitive advantage. However, the difficult and tedious process of analysis of management decision factors deems it undesirable. This study proposes a fuzzy decision-making system [1,2] that examines enterprise strategy factors, which are mostly fuzzy and uncertain, and converts them into messages that can be processed by computers. Fuzzy decision-making system uses fuzzy mathematical theory to assist decision-makers in establishing decision factors and carry out decisions. Computers are employed to improve and speed up the decision process [3,8-10]. Thus, this study proposes to construct a set