A FUZZY DECISION SUPPORT SYSTEM FOR SELECTING THE FACILITY SITE OF MULTINATIONAL ENTERPRISES

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Abstract. *The facility site selection is important for the decision-maker/leader of the multinational enterprises. In order to increase efficiency of decision-making ability of managers under the fuzzy investment environment, we propose this study. The paper is to describe the development of a fuzzy decision support system for selecting the appropriate facility site among countries of multinational enterprises. Also, the government may implement this system to adjust or improve the caused factors to meet the needs of multinational enterprises*
Keywords: Decision support system, Fuzzy sets theory, Facility site selection

1. **Introduction.** As the electronics business expands and the globalization era comes, selecting the appropriate sites for facilities has become a very knowledge-intensive and high technological process. While the decision-makers/leaders of multinational enterprises (MNEs) want to expand their scales and activities, the aggregative benefit rate of the investment environment factors is important for planning the operating strategies. To assess and compare the aggregative benefit rate of the investment environment factors among the several countries is important for the decision-makers for the facility sites selection.

Farmer and Richman [1] analyzed the international management significant factors systematically, and used the relationship among management processing factors, domestic environment factors, and international environment factors for measuring. Stobaugh [2] proposed an evaluating environment model. This model can point out the appropriate place and time for investing, and divide the environment factors into country-related variables and product-related variables. Skinner [3] divided environment factors into three categories, such as economic, politic, and society. Japan Mitsubishi Co. [4] proposed that it should simplify the environment factors while we want to evaluate the facility site for investing. When we want to select the appropriate facility site, the transportation costs is