

An Application of Grey Relational Analysis to Explore the IT Industry
Competitiveness of Taiwan

王文良, 周宗民, 陳彥銘

Information Management

Computer Science and Informatics

abewang@mi.chu.edu.tw

Abstract

In this paper, we applied the grey relational analysis to analyze the IT industry competitiveness rating of Taiwan, based on the report of British Economist Intelligence Unit (EIU), and to explore which factor has the highest relationship with the other factors among the impact factors of the IT industry competitiveness. Then we selected those countries having closely international business with Taiwan to examine which of them have similar developmental conditions in the IT industry by the overall grey relational analysis. The results of this paper revealed that (1) the most important impact factor of IT industry competitiveness of Taiwan is the human capital; (2) As for the overall analysis of each country, the one with similar developmental conditions to Taiwan in the IT industry is South Korea, followed by Japan; and the one with greatest difference is the United States.

Keyword : IT industry competitiveness index, grey system theory, grey relational analysis