

# 運用ICT技術推動大臺中區域整合之策略研究

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## 摘要

A city is the product formed at a stage when civilization and social productivity reach a certain level. Since the beginning of post-industrial era, the rapid growth and expansion of cities have brought constant problems and challenges to the urban development. According to the statistics by the United Nations, the global urban population is more than the rural population in 2009 and nearly 70% of global population will live in urban areas in 2050. However, according to the statistics from the Directorate-General of Budget, Accounting and Statistics, Executive Yuan, the urban population takes up 73.75% of the total population in Taiwan. The high population density has led to issues of traffic, society, economy, ecology and safety for the cities. A city is called an intelligent city if its highlight of future urban development is to obtain the solution to these issues through the application of information communication technology (ICT) and the integration of intelligence system. Therefore, the characteristic and label of a city of the new era is “intelligent city” with ICT as its most important core system. With ICT, a city is managed intelligently and developed sustainably with the combination and integration of different intelligence

systems, which are linked with space dimensions to solve the issues for the future city.

Nevertheless, the issue of “regional accessibility” is inevitable for all cities. The concepts of “rural area” and “urban area” depend on the features of economic activities, population density and geographic location. With globalized economy and increased education level in the urban areas, the trend of cities serving as competitors is more and more evident. Greater Taichung City has been promoted as a municipality at the coming of the era of the five municipalities. Urban issues about space structure, geographic condition, industrial structure, traffic and transportation for Greater Taichung City worsened due to the gap between urban and rural areas and the imbalanced allocation of resource when “a rich urban area merged with poor rural areas” after the promotion of Greater Taichung City.

Therefore, the study aims to evaluate and to select an intelligence program suitable to Greater Taichung City from the perspective of intelligent city, further building the regional integration strategy for Greater Taichung City. Professional questionnaire evaluation and selection with FDM is conducted at the first stage before the second stage in descriptive statistics. A systematic questionnaire to the 29 districts of Greater Taichung City was conducted with the districts divided into urban areas, suburbs and rural areas to construct the evaluating indexes for intelligent city for Greater Taichung City in the hope to find the solution to the issues between urban and rural areas resulted from the merge of Greater Taichung City and to provide references for urban development strategy for

Greater

Taichung City in the future.

Therefore, the study aims to evaluate and to select an intelligence program applicable

to Greater Taichung City from the perspective of intelligent city, furthermore to build the

regional integration strategy for Greater Taichung City. Professional questionnaire

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關鍵字：Intelligent City, Information Communication Technology, Fuzzy Delphi