

## 정보시스템 평가를 위한 제약 기반 영향평가 모형 설계

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## Effect Evaluation Model on the Basis of Restriction to Evaluate Information Systems

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### ● Abstract ●

These information systems projects have unique characteristics such as technology sensitiveness, network effectiveness, embeddedness, and externality, these investment projects have been not taken care of in the field of administration and evaluation. Furthermore, it is not easy to evaluate the results of projects under the circumstances where the conditions for evaluation of budget, time, and data leave much to be desired. But the efficient monitoring and effective analysis of information systems are surely needed for beneficent results of investment in information systems. We propose an effect evaluation model on the basis of restriction to evaluate information systems.

**키워드:** Information Systems; Evaluation; Management Model; Monitoring

### I. Introduction

The investment projects for information systems have been not taken care of in the field of administration and evaluation. It is so because these information systems projects have unique characteristics such as technology sensitiveness, network effectiveness, embeddedness, and externality. Furthermore, it is not easy to evaluate the results of projects under the circumstances where the conditions for evaluation of budget, time, and data leave much to be desired. But the efficient monitoring and effective analysis of information systems are surely needed for beneficent results of investment in information systems. We propose an effect evaluation model on the basis of restriction to evaluate information systems.

### II. Conditions for High-Quality Effect Evaluation

For high-quality effect evaluation, sequential indices should be prepared to meaningfully and trustworthily regulate and measure input factors, action procedure, outputs, intended results, and effects of a project. And the discovered changes of outcome indicators after project invention should provide counterfactuals that are logically appropriate and are affected not by other unrelated factors but by the project. And, according to available and statistical procedures, the decision on whether the project would contribute to the intended results or not and whether it would offer benefits to target population.

### III. Effect Evaluation Model on the Basis of Restriction

The general process to establish an effect evaluation model on the basis of restriction is performed as the following process; simplifying evaluation design, modeling comparative group design, handling the second data, recovering basic data, decreasing data collection cost, and strengthening evaluation design (Figure 1).

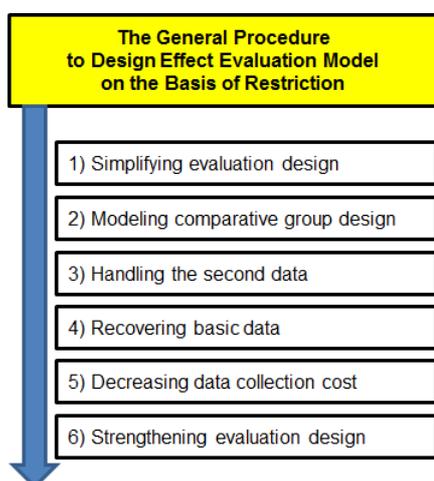


Fig. 1. The General Procedure to Design Effect Evaluation Model on the Basis of Restriction

### IV. Methods to Control Restrictions

There are several methods to control restrictions, that is to say, decreasing effects of budgets, time, and data. Firstly, the general quality to design evaluation should be strengthened.

Secondly, It should be intensified to design samples and analyze them statistically. Thirdly, Theoretical frame and the efficiency of counterfactuals should be reinforced. Lastly, the possibility of conclusions generalization should be tightened up.

### V. Conclusions

This effect evaluation model on the basis of restriction would certainly improve the trustworthiness of project result through optimized design and evaluation audit with considering characteristics of in-depth evaluation for information systems projects.

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