

IT 사업의 경제성 평가 모형 설계

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Economics Evaluation Model for Information Systems Project

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● Abstract ●

Lots of investment projects of new development and redevelopment for information systems have been not taken care of in the field of administration and evaluation, for these information systems projects have unique characteristics such as technology sensitiveness, network effectiveness, embeddedness, and externality. In fact, quantitative and qualitative evaluation of investments in information systems projects are not sufficient. It is critically important to generally evaluate benefits of development or operation cost, urgency, external effects, and so on. In addition, the efficient monitoring and effective analysis of information systems are surely needed for beneficent results of investment in information systems. We propose an economics evaluation model for information systems projects.

키워드: Information Systems; Evaluation; Management Model; Monitoring

I. Introduction

Many investment projects of new development and redevelopment for information systems have been not taken care of in the field of administration and evaluation, for these information systems projects have unique characteristics such as technology sensitiveness, network effectiveness, embeddedness, and externality. In fact, quantitative and qualitative evaluation of investments in information systems projects are not sufficient. It is critically important to generally evaluate benefits of development or operation cost, urgency, external effects, and so on. In addition, the efficient monitoring and effective analysis of information systems are surely needed for beneficent results of investment in information systems. We propose an economics evaluation model for information systems projects.

II. Modules of Economics Evaluation Model

For an economics evaluation model for information systems, we consider four modules such as economic feasibility, urgency, importance, external effects (Figure 1). The modules are categorized according to quantitative and qualitative characteristics. The economic feasibility means the profitability in a sense of financial money. It includes all the quantitative costs and benefits that are related to development or maintenance of information systems. The urgency means the emergency of information project over system replacement, administrative regulation, and law observance. The importance means the qualitative and strategic significance of information systems. It is unmeasurable qualitative effects such as improvement of duty quality. Lastly, the external effects mean quantitative and qualitative effects that affect customer. The customers are citizens, enterprises, and public organizations.

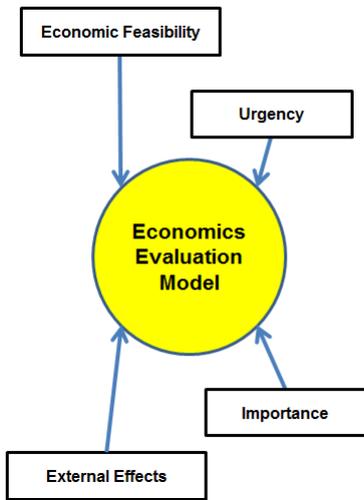


Fig. 1. Modules of Economics Evaluation Model

III. Economics Evaluation Model

We propose an economics evaluation model (Figure 2) for information systems projects. There are two major parts; one is economic evaluation standard, and the other is economics calculation. Firstly, the module for economic evaluation standard defines standard for development costs and benefits, maintenance costs and benefits, urgency, quality and strategy, and external effects. Secondly, by use of these standards, the model performs calculations of financial economic feasibility and general economic feasibility.

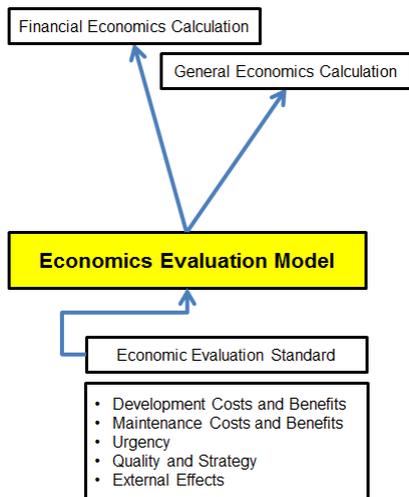


Fig. 2. Modules of Economics Evaluation Model

IV. Conclusions

Since the proposed model adopts the concepts of both financial economics and extended economics, it would be extended to broader fields of information systems evaluation. Especially, it could be used for standard in calculating political effects.

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