Value Measurement Model to Manage Information Systems

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Abstract

Even though many projects of new development and redevelopment for information systems are invested, they are not taken care of from the perspective of administration and evaluation. Also, decision makers fall short of not only support the process to check alternatives and select an alternative for investment and but also provide necessary information so as to maximize the effects of investments. That is to say, the suggestion of general direction toward IT investment is debatable. Against this backdrop, we propose a value measurement model to manage information systems.

Keywords: Information Systems; Evaluation; Management Model; Monitoring

I. Introduction

In these days, many projects of new development and redevelopment for information systems are invested. However, they are not taken care of from the perspective of administration and evaluation. Also, decision makers fall short of not only support the process to check alternatives and select an alternative for investment and but also provide necessary information so as to maximize the effects of investments. That is to say, the suggestion of general direction toward IT investment is debatable. Against this backdrop, we propose a value measurement model to manage information systems.

II. Stages of Value Measurement Model

For a value measurement model of information systems projects, four major stages (Figure 1) would be considered; developing decision making framework, analyzing alternatives, connecting information, and diffusing and documenting. The stage of developing decision making framework identifies, defines, and documents value structure, risk structure, and cost structure. The stage of analyzing alternatives identifies and defines alternatives. And then, it forecasts value or cost and analyzes risk. The stage of connecting information combines cost forecasted values. After calculating investment profitability rates, value points, and risk points, it compares value cost and risk. The stage of diffusing and documenting diffuses values to customers and connected persons. Also, the stage prepares documents for budget verification.

Fig. 1, Stages of Value Measurement Model
III. Types of Value Measures

In order to build a methodology for measuring, electronic services of information systems, various types of value measures are required (Figure 2). One axis includes four factors such as government to citizen, government to government, government to enterprise, and internal effectiveness or efficiency. The other axis includes five factors such as direct user value factor, social value factor measures, government financial value, government operational value, and strategic or political value.

IV. Conclusions

The proposed model would certainly provided a practical tool to measure financial values of information systems projects by governments or enterprises. The values could be measured by direct customer, social value, administrative or fundamental value of government, strategic or political value, and financial value of government. This try would be utilized in many fields after classifying benefits.

References