

# The Significant of Cobit Mapping Business Goal 12 and IT Goal 19 (Case Study: Stikom Surabaya)

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*Abstract - IT Governance is a branch of the corporate governance system focused on information technology (IT) as well as performance and risk management. IT Governance is defined as the processes that ensure the effective and efficient use of IT in enabling an organization to achieve its goal. There are many different frameworks that can be used for managing the delivery of cost-effective IT services. IT managing the delivery of cost-effective IT services does not always give the advantage to the company. There are times when the IT managing the delivery of cost-effective IT services does not provide any benefit, it can cause IT Productivity Paradox. IT Productivity Paradox can be prevented, one is to analyze the processes undertaken with IT. From this analysis we will get the significance of the relationship processes with the IT Goal. The significance will be seen which one significant process and which one are not significant to the IT Goal. If the IT process there are not significant to the IT Goal, the process does not need to be repaired because it has no effect on IT Goal. Existing IT governance frameworks are COBIT, ITIL, ISO 20000, 17799/27001, Six Sigma, etc. The IT Infrastructure Library (ITIL), initially developed in the UK by the Office of Government Commerce (OGC), is gaining traction in the global IT community as a framework for IT governance. ISO 20000-focusing upon IT service management. ISO 17799 / ISO 27001 - focusing upon information. Six Sigma-focusing upon operational performance and defect identification. COBIT - framework for information IT management risks. Control Objectives for Information and related Technology (COBIT) provides good practices across a domain and process framework and presents activities in a manageable and logical structure. COBIT's good practices represent the consensus of experts. They are strongly focused more on control, less on execution. These practices will help optimise IT-enabled investments, ensure service delivery and provide a measure against which to judge when things do go wrong. This research is intend to find out whether Cobit mapping Business Goal to IT Goal appropriate with case study. The result The results using SEM approach shows that the mapping of COBIT is not significant in the case studies of academic administration.*

*Index Terms - Business Goal, Cobit, IT Goal, IT Productivity Paradox, SEM, significant.*

## INTRODUCTION

For couple years IT alignment was the interesting topic to be discussed and deliver some new findings. Henderson and Venkatraman was propose IT alignment with proposition and management implications.

The reason why business and IT align to be discussed is how IT impact to organizations business. The alignment is not always give such a good impact for the organizations. When IT doesn't give positive impact for the organizations, it can cause IT Productivity Paradox [1].

When carrying out operation of the organizations, it needs management guideline. IT governance framework need to be implemented. Control Objective for Information and Related Technology (COBIT) can be used as tool that use to streamline the IT Governance implementation. [3]

## METODOLOGY

### COBIT

ISACA (Information System Audit and Control Association) introducing a framework for managing IT Governance in a company known as COBIT. COBIT can provide a set of acceptable practice in general because it can help the directors, executives and managers increase the value of IT and reduce risk. [3]

### PRODUCTIVITY PARADOX

Brynjolfsson [4] on their research Information Technology and Productivity: A Review of the Literature, said that the relationship between information technology (IT) and productivity has been the source of debate.

At The New York Times Book Review on July 12, 1987 article Robert Solow give a discourse entitled We'd better watch out raises stigma that the implementation of computer technology sometimes does not give a positive influence on the company. A sentence that makes being contradictory is "You can see the computer age everywhere but in the productivity statistics".

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### IT ALIGNMENT

IT Alignment Model is a good framework for comparing, analyzing the IT department objectives, targets and activities for the purpose, objectives and activities of the company. [4]

### STRUCTURAL EQUATION MODELING (SEM)

Structural Equation Modelling (SEM) is a structural equation model is a combination of the procedures developed in econometrics [5]. SEM is used to examine and justify a model and to explain the relationship between variables that exist.

### GENERALIZED STRUCTURED COMPONENT ANALYSIS (GSCA)

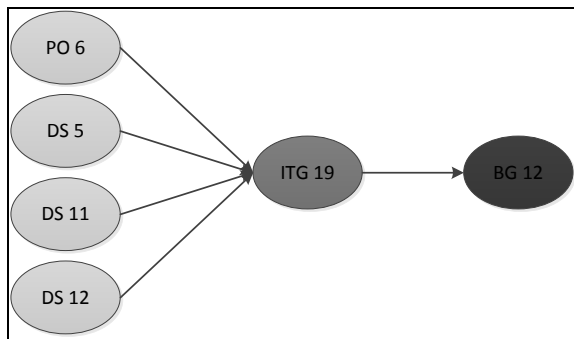
Generalized Structured Component Analysis (GSCA) a method for SEM created by Hwang and Takane. So it can be said that GSCA is part of the SEM-based components that have global criteria least square optimization. GSCA is equipped with the size of the model goodness of fit. GSCA was developed to avoid the shortage of Partial Least Square (PLS) is to complement global optimization procedures, and also maintains a local optimization procedure.

GSCA is a new method of SEM-based components that can be used to perform calculations scores and also can be applied to a small sample. [6]

### REFERENCES

- [1] Brynjolfsson, Erik. (1993). The productivity paradox of information technology. *Communications of the ACM*. Volume 36 (12), page 66–77.
- [2] Brynjolfsson, E dan Yang, S. (1996). *Information Technology and Productivity: A Review of the Literature*. Elsevier. Volume 43. Pages 179–214.
- [3] ITGI. 2007. *COBIT 4.1: Control Objective, Management Guidelines, Maturity Models*. United States of America: IT Governance Institute.
- [4] Henderson. J. dan Venkatraman. N. (1992). *Strategic Alignment: A model for organisational transformation through information technology*. T. Kochan & M. Unseem, eds, *Transforming Organisations*, Oxford University Press, NY.
- [5] Wijayanto, S. H. (2008). *Structure Equation Modelling, Konsep dan Tutorial Dengan Lisrel 8.80*. Jakarta: Graha Ilmu.
- [6] Tenenhaus, M. (2008). *Structural Equation Modelling for small samples*. Working paper no 885.

### HYPOTHESIS



**Figure 1.** Cobit mapping Business goal 19 and it goal 19 and its it processes.

H1 = IT process PO6 positively related to achievement IT Goal 19.

H2 = IT process DS5 positively related to achievement IT Goal 19.

H3 = IT process DS11 positively related to achievement IT Goal 19.

H4 = IT process DS12 positively related to achievement IT Goal 19.

H5 = IT Goal 19 positively related to achievement Business Goal 12.