

Possibility Of Cobit Quickstart Utilization For Small And Medium Enterprises To Assess It Control Objectives

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Abstract— This paper reports on part of a wider study into implementation of COBIT Quickstart in small and medium enterprises in Indonesia, with particular reference to small and medium enterprises in Bandung. The research is triggered by question about whether small medium enterprises in Indonesia realized about the necessities of tools to assess IT governance in their organization. It will be done by doing a survey to find out awareness of decision makers in organization, whether they realized, that there is necessities of tools to assess IT Governance. The findings indicate that COBIT Quickstart can be implemented as a tools and guidance in assessing IT Governance for small and medium enterprises. Participating companies in this research correctly estimates the possibility of using COBIT Quickstart as a guidance to implement IT control objective in an organization.

Keyword : *COBIT Quickstart, IT control objective, IT governance, Information Technology*

I. INTRODUCTION

Changes in nature and complexity of transaction require organization to adapt and use IT to capture, record and process economic transaction and report the information to support stakeholders in decision making process. Necessities of utilizing Information Technology (IT) in business process has been realized by the organizations lately, but awareness that IT is asset still under question mark. Usually assets are maintained only if the assets are tangible. Based on that perceptions, IT, information systems and sort of are not considered as assets. The lack of awareness of intangible assets is reflected in less focus on maintenance and security over IT.

To get optimum result of the usage of IT, organization should focus in IT governance. IT governance including stakeholder involvement to give input to IT manager to improve alignment of IT support into business objective. In many cases, small and medium enterprises don't give proper attention on management over IT resources even they already use IT in transaction processing and reports preparation.

To gain adequate IT governance, organization need a framework or internal control systems that can support proper management of IT in the organization. There are

many IC systems available such as COSO framework, COBIT framework, COCO framework and so on. But, the usage of COBIT framework is more common after Sarbanes-Oxley Act in 2002. COBIT framework is released by ISACA to help organization to assess their IT control objective. In 2002, ISACA released COBIT Quickstart to help SME in assessing their IT control objective.

Objective of this research is to find out whether COBIT Quickstart can be used as a guidance to implement IT control objective in an organization. The preliminary study will be developed to find out methodology that can be used by SME about IT governance in the organization, specifically, IT control objective implemented in the organization.

Assessment of possibility of using COBIT Quickstart as tools to guide IT control objective in organization is done by doing preliminary test in COBIT quick start : "Stay in Blue Zone" and "Watch the Heat". If the companies under survey are passed both of the test, this research can be improved by doing in depth survey using questions in COBIT quick start standard. The objective of this study are to answer research question as follow: whether COBIT quick start can be implemented in SME in Indonesia?

II. LITERATURE REVIEW

A. *The necessity of utilizing Information and Communication Technology*

Radovanovic (Radovanovic, 2010): "Critical element important for the survival and success of the organization is effectively managing information and communication technology or ICT, which is reflected in the increase depending on the information and their associated systems, increased vulnerability and a wide range of threats to the Information and Communication Technology ICT), the extent and cost of existing and future investments in ICT systems , the potential of technology to change work organization and business practices, creating new opportunities and reduce costs."

B. IT Governance

IT Governance is a concept that discussed lately, by IT-based people and also by business-based people. IT Governance definition according to Leyer (Leyer, 2009) : *“IT governance is the responsibility of executives and the board of directors, and consists of the leadership, organizational structures and processes that ensure that the enterprise’s IT sustains and extends the organization’s strategies and objectives”*. In regard to utilization of IT in the organization, Parker (Parkes, 2004) believe that IT Governance refers to : *“how well an organization governs or controls those of its activities that involve the use of information technology. In both business and government organisations, there are now few key activities that do not involve the use of IT as either an enabler or an intrinsic part of the capacity to allow the activity to take place. It should be stressed that IT governance refers to how the entire activity using IT is controlled—not just the IT department or the physical manifestations of IT, but the business knowledge and information that the activity requires for its successful operation.”*

IT role in the organization has been shift from just only support function role became main support in core business in the organization. Leyer (Leyer, 2009) state that : *The scope of the impact of IT has widened to encompass every key strategic decision. Small businesses must be prepared to have not only a strategic plan for the primary business activity, but also a strategic plan for IT that is aligned with the overall guiding objectives of the organization. IT governance fails to serve its purpose within business when its objectives and goals are incongruent with the overall strategic plan.”*

C. Success Criteria of IT Governance

There is a lot of framework and guidance to help decision maker in the organization to manage the implementation of IT Governance that can combine IT Governance with objective of the top level management of the organization. Leyer (Leyer, 2009) suggest major factors that support successfulness in IT Governance implementation as follow : *“Clearly communicated and differentiated business strategy—A focused and well-defined business strategy should be established by top management and communicated to all levels of management; Clear business objectives for IT investments—Businesses that focus on a smaller subset of goals and objectives for investment in IT are better able to achieve effective IT governance; High-level executive participation in IT governance— CEO involvement in laying the foundations for IT governance has the greatest positive correlation of all the best practices discussed; Stable IT governance with few changes from year to year—Because technology impacts business with a number of changes every year, stability within the governance structure of IT has proven to be an important factor in the success of governance; Well-functioning, formal acceptance process—Businesses with*

effective IT governance in place also have well-established exception processes in place for dealing with acceptance of new IT investment ventures; Formal methods of communication—Establishing guidelines and standard procedures for communication further strengthens the IT governance structure.”

D. IT Governance Framework

There are many standards and methodology to assess IT function in pursuing objective to control and govern IT. Such framework that used are COBIT, ITIL, COSO, ISO 27002, ISO 9000 and so on. An organization can choose to use one of the standards or uses combination of this framework together. The decision is depend on situation and condition of the organization. The decision makers of the organization had to analyze carefully of the frameworks available in order to choose that best framework that fit with organization’s need.

E. COBIT and COBIT Quickstart

IT Governance Institute (2007) introduce that:” *The need for assurance about the value of IT, the management of IT-related risks and increased requirements for control over information are now understood as key elements of enterprise governance. Value, risk and control constitute the core of IT governance.”* And *“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 optimize IT-enabled investments, ensure service delivery and provide a measure to judge against when things do go wrong.”*

Data about transactions and data supported transactions are captured and processed by information systems of the organization. Management needs to ensure that information systems in the organizations processes data in such way to provide information that proper from the business’s perspective as indicate by IT Governance Institute (2007): *” Effective; Efficient; Confidential; Accurate, useful and timely; Available; Compliant; Reliable”*

Even COBIT is useful to assess IT control objectives in the organization, its complicated objective made companies decide not to use COBIT framework. For small and medium enterprises where budgets are tight, using COBIT framework are considered as non value added activities. For this reason, ITGI developed COBIT Quickstart. As mention in the guidelines: *“COBIT is a comprehensive set of resources that contains the information that organizations require to adopt an IT governance and control framework. However, the breadth and depth of the guidance provided by all of COBIT’s resources may be too detailed and overwhelming for smaller organizations. Or, for some larger organizations, COBIT may require too much time to analyze and focus on*

when taking the first steps towards IT governance. The driver behind COBIT Quickstart is the need of IT managers of smaller organizations for a simple-to-use tool that will speed up the implementation of key IT control objectives. Equally, IT managers of larger organizations can leverage the tool to 'quick start' the initial phases of a broader IT governance implementation."

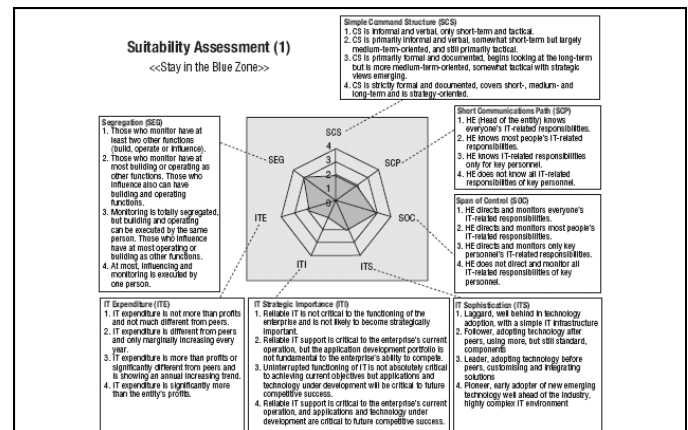
Even the COBIT Quickstart are simplified version of COBIT, it provide sufficient depth to assess IT control objective for small and medium enterprises. As indicate in the baseline IT Governance Institute (2007), : "Quickstart is aimed at small and medium-sized organizations. However, it also is suitable for any organization with an appropriate control environment, which is considered to be one that has: A simple command structure; Short communications path; Limited span of control; Not much segregation of responsibilities. In addition, it is suitable for organizations in which: The IT environment is not particularly complex; The IT expenditure is not very significant; IT is not that strategically important; The use of IT is not leading-edge"

To determine, whether COBIT Quickstart are suitable for the companies, the COBIT Quickstart baseline provide two test to assess companies' suitability for implementing control over IT based on the Quickstart set of controls.

The first test is stay in blue zone. As indicate by the baseline IT Governance Institute (2007): "The different dimensions of this suitability test are as follows: Simple command structure—This dimension measures the degree to which authority, rules and control are institutionalized in the organization. This command structure varies from very informal and verbal to strictly formal and documented; Short communication path—The communication path component indicates how many layers are situated between the head of the entity (HE) and the IT staff. This illustrates how directly, quickly and efficiently the HE can communicate with the IT staff, and is measured by determining how well the HE knows the staff's IT-related responsibilities; IT sophistication—The IT sophistication component refers to the profile of the organization with regard to the adoption of new technologies and the complexity of the IT environment relative to industry and peers. This profile ranges from being a pioneer, adopting new technologies well before industry in a complex IT environment, to being a laggard, adopting new technologies well behind peers and industry while keeping the infrastructure simple. Taking a technology leadership position and working in a complex IT environment evoke the possibility of larger risks and wider control requirements; IT strategic importance—This dimension evaluates how dependent the organization is on IT to operate and function, and to achieve competitive advantage and success; IT expenditure—The IT expenditure component is closely linked to the IT sophistication and IT strategic importance dimensions, and ranks the organization based on its IT expenditure relative to profit and compared to peers;

Segregation—The segregation dimension checks whether the responsibilities for building, operating and influencing IT solutions and monitoring same are overly concentrated in one person or, instead, are distributed properly over more people."

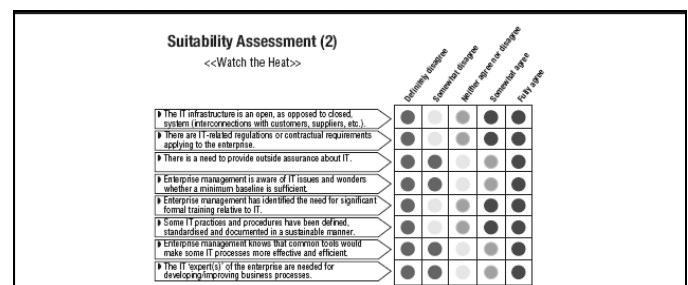
Figure 1 show suitability assessment to assess whether a company is suitable to use COBIT Quickstart to assess IT control objective in their organization. The situation in the company will be assessed as indicate in seven dimensions, and the result will be analyzed. If the assessment resulting that a company is stay in the blue zone as shown in figure 1, the company is suitable to use COBIT Quickstart.



Source : IT Governance Institute (2007).

FIGURE 1

The second test is 'Watch the Heat'. This second test are also assess companies suitability in using COBIT Quickstart. If the company is in the red zone, it indicate that COBIT Quickstart is not suitable for the company.



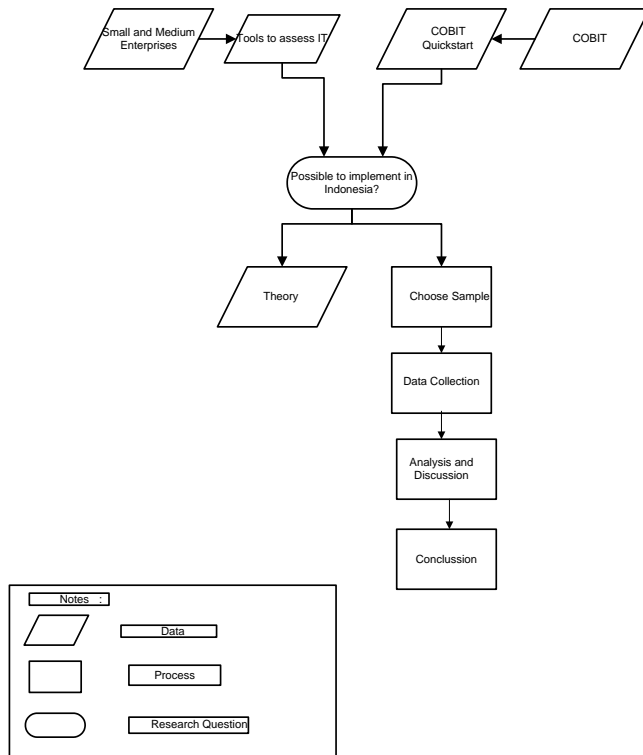
Source : IT Governance Institute (2007).

FIGURE 2

III. EASE OF USE

A. Research Method

1). Research Framework



- There are necessities of a tools for organizations to assess IT governance in their organization. This requirements are valid for all size of organization, not only for large enterprises which invested large amount for IT, but exist in small and medium enterprises also.
- ITGI (IT Governance Institute, 2007), triggered by demand from small and medium enterprises, design simplified standard that can be used as baseline for small and medium enterprise. This simplified standard are taken from COBIT methodology. It takes 59 control objective from 210 available.
- From two facts above, there is research question: is COBIT Quickstart can be implemented in Indonesia?
- Based on theory and guidance from COBIT Quickstart, sampling type and population are chosen. Sample are chosen by availability of data and convenience of data collection through access to the organization.
- The next step of the research are data collection by interviewing the enterprises chosen based on list of question provided in the COBIT Quickstart.
- After data collected, the data analyzed and conclusion made to answer: can COBIT Quickstart implemented in small and medium enterprises in Indonesia.

2). Target, Time and Location of the Research and Data Collection Techniques

The population of this research are small medium enterprises in Indonesia. Sample are taken in Bandung by judgmental sampling based on availability of access to data and availability to interview key person in the organization.

Data collection done by interviewing key person in the organization to assess key control objective in the organization. The answers about key control objective will be judge to assess are those small and medium enterprises taken can implement COBIT Quickstart in their organization. There are 50 participating companies in this survey and 42 of those participating companies are suitable for using COBIT Quickstart based on the two tests provided by the COBIT Quickstart baseline.

B. Study result and Discussion

To assess whether COBIT Quickstart is suitable for the companies, the COBIT Quickstart provide two tests: 'Stay in the Blue Zone' and 'Watch the Heat'. by using dimensions and list of questions in the COBIT Quickstart, the key person in the participating companies are interviewed.

The result of the survey are as follow:

Test 1 : Stay in the Blue Zone

No	Dimensions	Average Value
1	Simple command structure	1.81
2	Short communication pat	1.3
3	Span of control	1.38
4	IT sophistication	1.8
5	IT strategic importance	2
6	IT expenditure	1.4
7	Segregation	1.7

From the result above, it can be concluded that participating companies in this survey are suitable for using COBIT Quickstart to assess IT control objectives in their companies. Assessing individual company is generate the similar result, from 50 participating companies, 42 are suitable in using COBIT Quickstart based on test 1 of the COBIT Quickstart.

Test 2 : Watch the Heat

No	Descriptions	Average Value
1	The IT infrastructure is an open, as opposed to closed, system (interconnections with customers, suppliers, etc.).	1.8
2	There are IT-related regulations or contractual requirements applying to the enterprise.	1.6
3	There is a need to provide	1.6

	outside assurance about	
4	Enterprise management is aware of IT issues and wonders whether a minimum baseline is sufficient.	2
5	Enterprise management has identified the need for significant formal training relative to IT.	1.7
6	Some IT practices and procedures have been defined, standardized and documented in a sustainable manner.	2
7	Enterprise management knows that common tools would make some IT processes more effective and efficient.	2.7
8	The IT 'expert(s)' of the enterprise are needed for developing/improving business processes.	2.1

Notes of value above:

- 1 : definitely disagree
- 2 : somewhat disagree
- 3 : neither agree nor disagree
- 4 : somewhat agree
- 5 : fully agree

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IV. CONCLUSION

COBIT Quickstart can be implemented as a tools and guidance in assessing IT Governance for small and medium enterprises. As indicate in the COBIT Quickstart Framework and Baseline published by ITGI, COBIT Quickstart is useful as starting point and providing guidelines about things to do. Additional control may be required, based on size, type, condition and business strategy of the companies.

Many key person in the participating companies didn't realized the necessities of control over IT in their companies and therefore didn't realize demands of tools to access IT control objectives in their companies. This research can be used as starting point to pursue awareness of the necessities.

REFERENCES

- [1] IT Governance Institute (2007). COBIT Quickstart Framework, 2007
- [2] Kushwaha, G., S., (2011). Competitive Advantage Through Information and Communication Technology (ICT) Enable Supply Chain Management Practice. International Journal of Enterprise Computing and Business Systems, vol. 1, 2011
- [3] Leyer, J., Quigley, K., (2009). Small Business IT Governance Implementation. ISACA Journal Online, vol. 4, 2009.
- [4] Parkes, H., (2004). IT Governance and Outsourcing. ISACA Journal, vol. 5, 2004.
- [5] Radovanovic, D., Radojevic, T., Lucic, D., Sarac, M., (2010). Analysis of Methodology for IT Governance and Information Systems Audit, International Scientific Conference. 2010.
- [6] Ramanathan (2007). IT Governance – Challenge in Implementation from an Asian Perspective, Information Systems Control Journal, vol. 5, 2007.