# Vocational Higher Education Governance Recommendation Based on Cobit 5 Enabler Generic Model

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#### Abstract

Enterprise governance for higher education can be viewed as arrangements that include a variety of university assets in order to support the strategy in achieving the goals and objectives. In the implementation governance in university there are factors that affect good governance which are individual or groups. These factors are then called an enabler of enterprise governance. In the previous research obtained the fact that the enabler of enterprise governance that provide significant influence in the governance of vocational higher education is the organization structure and information. Using four common dimensions for enablers in COBIT 5 Enabler Generic Model will give recommendation for governance in vocational higher education. These recommendations are expected help the vocational higher education are print of governance needs by considering the enablers of organizational structure and information.

Keywords: enterprise governance, COBIT 5, Generic Model Recommendation

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#### 1. Introduction

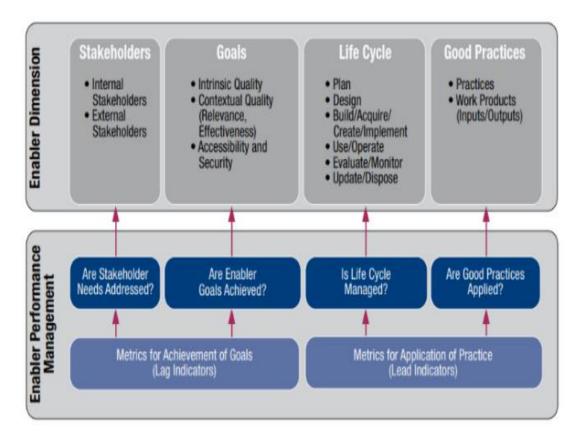
In previous research, Nugroho and Surendro proposed a model of vocational university governance. It consits seven enablers that influence the implementation of governance in vocational higher education. Model of Vocational University Governance are built based on governance university components and principles of good university governance with reference models that exist within ISO 38500 framework. Enablers that exist within COBIT 5 framework will be used as a determining factor in the preparation of the proposed model of governance and measurement model of vocational university governance [2]. In governance of vocational higher education there is two kind of enablers. Main enabler is an enabler that gives significant influence on the governance of vocational higher education. The main enablers are organizational structure and information. Support enablers is enabler that supports governance of vocational higher education can run well. The support enablers are principles, policies, and frameworks, process, culture, ethics and behavior, people, skills, and competencies, services, infrastructure, and applications [3].

Base on the result, in this paper will be presented recommendation for governance in Vocational Higher Education. This recommendation is made by using four common dimensions for enablers in COBIT 5 Enabler Generic Model. Figure 1 shows four common dimensions for enablers. These recommendations are expected help vocational higher education in preparation for blue print of governance by considering the enablers of organizational structure and information.

## 2. Research Method

Our research follows the Design Science Research Methodology (DSRM). There are six steps in the DSRM process, problem identification and motivation, definition of the objectives for a solution, design and development, demonstration, evaluation, and communication. On this paper will only do 3 early stages of DSRM [3]

- Problem identification and motivation. Based on previous research, the problem is how to provide recommendations for vocational higher education related governance.
- 2. Define the objectives for a solution. Using four common dimensions for enablers in COBIT 5 Enabler Generic Model will give recommendation for governance in vocational higher education. These recommendations are expected help the vocational higher education in preparation of blue print of governance needs by considering the enablers of organizational structure and information
- 3. Design and development. The proposed recommendations will refer to components that will devise each enabler, i.e. stakeholders, goals, best practice, work product, key goal indicators, and key performance indicator. The size of the achievement for main enablers adopted base on COBIT 5 Framework and Diploma Accreditation Forms in accordance with the needs of the vocational university governance.





# 3. Results and Analysis

# 3.1. Enterprise Governance

The incidence of a variety of major scandal befall a company both in the United Kingdom or United States in the 1980s in the form of a flourishing culture of greedy and the takeover of the company aggressively more aware people of the necessity of a system of good governance [13]. In business world, enterprise governance is a factor in competitiveness is as important as the quality of human resources, who know and how the enterprise should move to increase the capacity of innovation [14]. Enterprise governance is a principled management system on the clarity of responsibilities and duties, justice, transparency, responsibility, and accountability. All entities that need management where the stakeholders concerning the wider community, requires a good enterprise governance [13].

Enterprise governance components include what became the domain of governance. The component is covered, if there is a principle to support the implementation of enterprise governance. This principle will be the part that influence strategic policy as well as how the company runs its business practices so that the output performance of a company or organization can be improved.

To see what principles should be applied in the implementation efforts of the enterprise governance then we can compare them based on the results of earlier research in Figure 2.

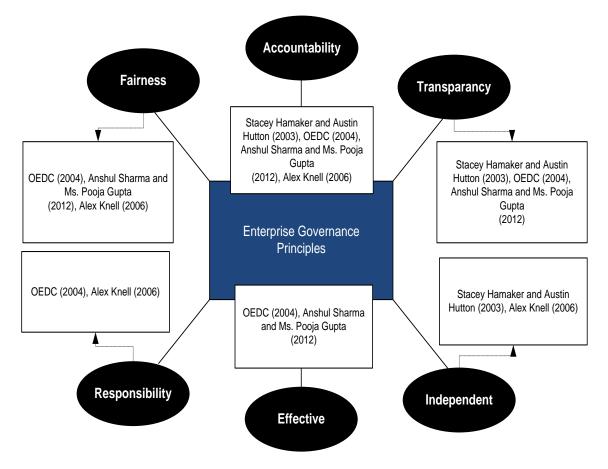


Figure 2. Enterprise Governance Principles

Basically, principle is a thing that must be constantly maintained and carried out in implementation of enterprise governance. These principles are expected to cling to every activity that run the Organization to achieve its vision and mission. This means that the Strategy which is translating the vision and mission have to pay attention to basic principles in practice in order to be able to walk according to what is already planned.

Governance is a critical issue in university because the University experienced dramatic changes in a certain decade including with regard to research and innovation. Research and innovation can be run in the production of knowledge in university getting high [15]. The practice of good governance is crucial for improving the performance of the university. In addition, it expressed that the reform in the field of education and policy changes contribute to the body of knowledge of university governance [16].

In the implementation of the governance of the university there are factors that affect good governance which are individual or groups. This factors are then called an enabler of enterprise governance. Governance enablers are the organizational resources for governance, such as frameworks, principles, structures, processes and practices, through or towards which action is directed and objectives can be attained. Enablers also include the enterprise's

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resources e.g., service capabilities (IT infrastructure, applications, etc.), people and information. A lack of resources or enablers may affect the ability of the enterprise to create value.

The COBIT 5 enablers, as introduced in Figure 3, can be applied in practical situations and can be used to implement effective and efficient information governance and information management in the enterprise. All enablers defined in COBIT 5 have a set of common dimensions that are illustrated in the COBIT 5 enabler model. These dimensions:

- Provide a simple and structured way to deal with enablers.
- Allow enterprises to manage their complex interactions.
- Facilitate successful outcomes of the enablers.

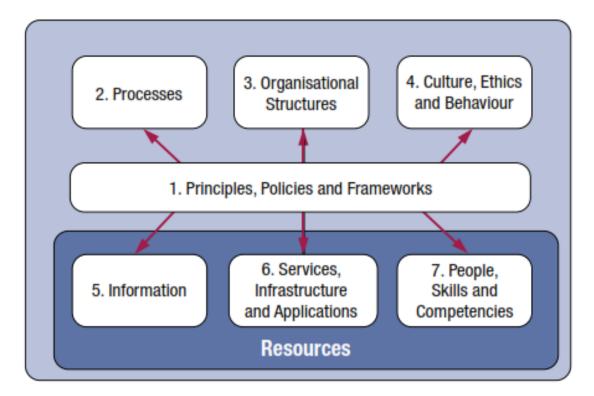


Figure 3. COBIT 5 Enablers [1]

## 3.2. Governance Model for Vocational Higher Education

Enabler of Enterprise governance is a factor that will be identified how large this influence in the governance of vocational higher education. Therefore, in the process, the enabler of enterprise governance will be a consideration. Vocational higher education should get accurate information, which enabler provides a significant influence and which enabler that supports only enterprise process so that in the preparation of university governance blue print will be made a priority scale [2]. The governance model for vocational higher education with basic enterprise governance framework ISO 38500 with enablers is derived from the COBIT 5 framework.

The results of the evaluation of the model by using path analysis showed in Figure 4, there were only two enablers who is main enabler, organizational structure and information while the other five factors grouped into a support enabler.

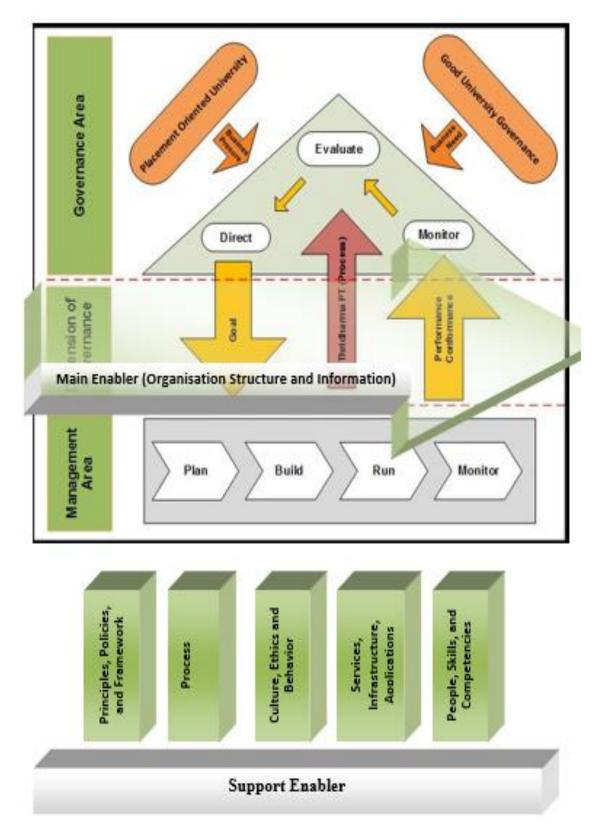


Figure 4. Evaluation Model of Governance in Vocational Higher Education [3]

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#### 4. Results

Based on the overall results of the analysis obtained the fact that the enabler of enterprise governance that provide significant influence in the governance of vocatiolan higher education is organisational structure of the information. In fact, In fact, enterprise governance is one of the efforts made by the Organization to provide the division of authority and responsibility. In this case, a good organizational structure should certainly be able to describe and guide the organization in terms of the division of authority and responsibility.

The results of this analysis can be a mirror for the organization in this vocational higher education, when preparing a blueprint for governance must be ascertained that organizational structure currently exists able to answer the needs of governance or not. If it does not meet what is required then it will need to be evaluated along with the leadership of vocational higher education along with the Senate. It is intended that, each person / units that exist in the organizational structure already understand the rights and responsibilities of each resulting in a governance process that will run no more confusion associated responsibilities attached to each individual or unit.

Earlier research relates to the influence of organization structure in the governance of an enterprise does not exist specifically. However, one study found by the authors show that organizational performance is significantly influenced by a factor or the presence of the CEO. The research found evidence supporting the hypotheses that the CEO is a factor that has an impact on the performance. He has an higher impact when the industry's level of growth and debts are more important and where the level of concentration is lower [11]

Information life cycle management including master data, metadata, and unstructured content as the foundation layer of the blueprint. It uses domains of data management, quality management, governance, and archives to ensure high-quality data is available across the enterprise [12].

Base one the model evaluation of governance for vocational higher education, will give recommendation. The proposed recommendations will refer to components that will devise each enabler, i.e. stakeholders, goals, best practice, work product, key goal indicators, and key performance indicator.

The size of the achievement for main enablers adopted base on COBIT 5 Framework and Diploma Accreditation Forms in accordance with the needs of the vocational higher education governance. Measure of achievement of each enabler is expected to be a vocational higher education guide when preparing a blueprint for governance at the each university needs and its characteristics.

Dimension for Enabler	Recommendation
Stakeholder	Stakeholders for the organizational structure come from internal and external stakeholder university. Entities that exist in university that are individuals or groups are internal stakeholders. Clients, suppliers, and regulatory agencies are external stakeholders.
Goal	Objectives can be achieved from the existence of the organizational structure within the scope of university governance is the proper credentials and the existence of the principle - the principle of implementation are well run. Organizational structure should include a number of activities and a good decision for university.
Best Practice	<ul> <li>a. The operational principle Practical arrangements of how the structure will operate.</li> <li>b. Composition The organizational structure which includes members from both internal and external stakeholders.</li> </ul>

# A. Organizational Structure

Dimension for Enabler	Recommendation
	c. Span of control Limitations associated with the right of decision making in the organizational structure
	d. Level of authority Decision-making authority.
	e. Delegation of authority
	The organizational structure is made to be able to gave the delegation of authority for decisions taken.
	f. Escalation procedures
	The procedure to be used if necessary action in case of problems related to the decision-making
Work Product	a. Statute of Vocational Higher Education.
	b. Decision Letter related to the division of authority in vocational higher education.
Key Goal Indicator	<ul> <li>Stakeholder needs related to the organizational structure have been fulfilled.</li> </ul>
	<ul> <li>b. The existence of proper credentials according with the organizational structure.</li> </ul>
	c. The existence principle of the implementation according with the duties and each functions.
Key Performance Indicator	a. The operational principle is run by an entity that is in higher education.
	<ul> <li>The composition of people in the organizational structure according with the needs of higher education to run the origination</li> </ul>
	<ul> <li>Range control with regard to decision-making is executed according to existing procedures.</li> </ul>
	d. The level of delegation of authority and executed according to established procedures.
	e. Escalation procedures are run in accordance with the applicable rules.

# **B.** Information

Dimension for Enabler	Recommendation
Stakeholder	Internal stakeholders for enabler of information are the academic community, particularly those directly involved in the learning process (faculty and students). The external stakeholder is BAN-PT, Higher Education, and Industry as an institution that has the authority to assess the quality of higher education.
Goal	One of the responsibilities that must be done in line with the tridharma process that has been ongoing is whether the information related to the process of learning and innovation according with the needs of higher education, presented in a way that is understandable and clear, and guarantee the availability of the

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Dimension for Enabler	Recommendation
	ease of information provided.
Best Practice	<ul> <li>a. Standard operating procedures (SOP) to convey information.</li> <li>b. Academic decision-making strategy based information</li> <li>c. Utilization of information for sharing knowledge (knowledge sharing)</li> </ul>
Work Product	a. The guide book of information systems for the academic community.
	b. Strategic Plan Information Systems Unit.
Key Goal Indicator	<ul> <li>a. The needs of internal and external stakeholders with regard to the information already fulfilled.</li> <li>b. The suitability of the information obtained academic community in the process of academic needs.</li> <li>c. Presentation of information easily understood by the academic community.</li> <li>d. Required information easily searchable and accessible to the academic community.</li> </ul>
Key Performance Indicator	<ul> <li>f. Standard of procedure how information is communicated and run well.</li> <li>g. Every decision related to the process of academic and non-academic in universities based on accurate information.</li> <li>h. Increased participation of the academic community in building a conducive academic atmosphere through knowledge sharing.</li> </ul>

## 4. Conclusion

The governance of the vocational university governance is an important thing in order to support the achievement of goals through a planning and strategy for enterprises governance with reference from ISO 38500 framework and consider the enabler contained in COBIT 5 framework. These recommendations help the vocational higher education in the preparation of blue print of governance needs by considering the enablers of organizational structure and information.

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