Capability Model of Manage Human Resource And Service Agreement at PT X

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Abstract— This research was made with purpose to measure the capability of human resource and work management in PT. X using COBIT 5.0. In the assessment process, researcher applied 1 domain (align, plan, and organize) with 2 processed, Manage Human Resource APO 07) and Manage Service Agreement (APO 09). Data collection was obtained from the distribution of questionnaires to IT division (there were 127 items of the question and 10 respondents). The result of this research figured out that APO 07 stopped in level 2 with score 82.50 in level 3 and APO 09 ended in level 3 with score 84.10 in level 4. In conclusion, there were still few problems that made human resources in PT X unable to reach level 5. PT.X ought to do audit regularly in deep and holistically.

Keywords— Align Plan and Organize, Capabilities Level, COBIT 5.0, Manage Human Resources, Manage Service Agreement

I. INTRODUCTION

Along with the rising numbers of institutions, both government and private sector are all depends and relies on information technology to support the annual activities, therefore a decent quality of employees are needed to work on their jobs. One of the examples is PT. X a major company who operates in the banking sector that contributes an impact in national economy and employed most likely 2000 employees that are working in IT/Operation division, in emphasizing the development and enhancement of Human Resource. Hence, human resources are required to have good skills and capabilities of technologies that are needed in order to serve their customers. To meet the need of human resources' enhancement, researcher was attempting to measure the level of capacity in human resource management and agreement service management division in PT. X.

Researcher is eager to offer a solutions in doing the measurement level of capacity and provide reviews, and moreover the documentations as the evidence to show to what extent the capability level that PT. X have prior to these 2 particular divisions. Throughout the observation, researcher were utilized the COBIT 5.0 with 1 domain, Align, Plan, and organize, and also with 2 process, APO 07 (Manage Human Resource) and APO 09 (Manage Service Agreement).

II. THEORY

A. Human Resource

Human resources contained 2 definitions. First, it is a work effort or services that could be offered in a production process. Whereas on the other hand, human resource reflects the quality of effort that's been given by a person in a certain time to produce products or services. The second definition is related to a person able to offer service or work effort itself. Capable in working means able to do economist activities, in could produce product or service that fulfill society's needs [1].

B. Information System Audit

Information system audit is an evaluation to discover the level or conformity between information system application with the procedures that has been established [2]. Beside, it is to find out whether the information system has been designed and implemented effectively, efficiently, and economically, as well as holding a decent mechanism of assets security, also to guarantee an adequate integrity. Through the information system audit, a company is able to have grown and develop, therefore it could benefit people.

C. COBIT 5.0

COBIT 5.0 aims to manage and get the right decision, and can be utilized and executed using technology [3]. COBIT 5.0 had 5 domains, namely: EDM (Evaluate, Direct, and Monitor), APO (Align, Plan and Organize), BAI (Build, Acquire and Implement), DSS (Delivered, Service, and Support), and MEA (Monitor, Evaluate Access). While the existing processes in COBIT 5.0 has 5 EDM process, the APO has 13 process, BAI has 10 process, DSS has 6 process, and MEA has 3 processes.

III. METHODS

The object of this research is the PT X. PT X is a banking company that was implemented by the Government of Indonesia. The following is the details of the method that researcher applied:

A. COBIT 5.0

The methods used in this research is COBIT 5.0. variable is used to Manage Human Resource APO 07) and Manage Service Agreement (APO 09).

B. Capability Model

The output of this research is the level of capability of the model where the capability model has 6 levels include :
1. Level 0: Incomplete Process
   In this level, organization is not implementing any kind of information technology processes that suppose to be carried out or haven't reached out the goal yet.
2. Level 1: Performed Process
   This stage, the organization has succeeded to perform information technology process, moreover the purpose has been achieved indeed.
3. Level 2: Managed Process
   At this level while implementing the IT process and achieved the goal, it has to be performed and managed well, therefore there's an additional grade in the assessment.
4. Level 3: Established Process
   In this stage the organization is having the standardised in the entire IT process.
5. Level 4: Predictable Process
   At the moment, organization has ran the IT process in a certain boundary (for instance: time) and generated from the measurement that has been held in the previous IT process.
6. Level 5: Optimizing process

On this very stage, organization inventing innovations and working on a continuous improvements to enhance the abilities.

This study adopts the audit stages according to Gallegos. Hereby is the 4 steps from Gallegos.
A. Planning
   This stage is determining the scope of the audit object, evaluation standard of evaluation from the audit results, and communication with the management of an organization regarding the vision, mission, target, object's purpose that will be observed. Activities that are done while planning, as follows: scope determination and audit purpose, organizing the audit team, comprehension regarding business client operation, evaluation of the previous audit outcome, and the preparation of the audit program.
B. Field work
   This phase could be done by doing interview, stage, or any surveys to the observation location in order to get the data from related parties.
C. Reporting
   In this stage, the obtained data are gathered and capability level calculation is held that refers to the interview results, surveys, and summary of the questionnaire that were distributed. Based on the result, the level of capability and the ideal performance expected could be shown as the next reference.
D. Follow Up
   While in this stage, the auditor is responsible to provide the documentation of the audit results in a form of recommendation of improvement that has been observed. However, the rest of the improvement's right will be management's obligation, whether to apply the solution offered or only take it as a guidance for the future development.

While working on this research, researcher spreaded out the questionnaires to 10 persons (IT strategy and architecture, IT infrastructure, IT Applications Development, and IT Applications Support. The questionnaires which researchers take from COBIT 5.0 [4]. And also did interviews to 4 persons in IT division (Human Resource Development, IT Application development, and Internal Audit).

IV. RESULT

This result could be shown through audit steps as following:

A. Planning

Researcher discovered the need of PT. X and started to list down the needs, will be audited,

those are: human resource and work agreement. For this matter, researcher applied the COBIT 5.0 framework to measure the capability level in PT. X, in particular researcher using IT Enabler: Align, Plan, Organize 7 (human resource) and Align, Plan, and Organize 9 (service agreement).

B. Field Work

To obtain the data, researcher used questionnaires, interview, and observation as the technique in field survey of IT division. The questionnaire contains 127 question items and 10 respondents, whereas in the interview there was 4 representatives as the respondent from IT division. Lastly, researcher process all the data that has been submitted.

C. Reporting

From the questionnaire and interview results, researcher found 56 audit findings in the questionnaire and 20 audit findings from the interview. However, there were some crucial findings need to be solved immediately.

D. Follow Up

Researcher will deliver this report to the internal audit team in PT. X as an advice and recommendation. Nevertheless, in order to execute, internal audit parties definitely need time due to the permission proposal to the related or involved parties audited.

Table. 1

PROCESS	AUDIT	IMPACT	RECOMMENDATION
APO 07.01.01	There are functions for resource planning and monitoring that weren't arranged well.	Unable to encounter possibilities that occured	Re-arranging management resources and offer backup plan.
	The presence of cooperation with third party for the development of IT, it can't be executed internally.	Degradation of internal skills and increasing cost.	Corporation is supposed to maximizing the internal human resources, before considering the outsources
APO 07.02.01	Independency of one's in the process of PTO and SPO	There's a possibility that someone is using the information for another interest especially in PTO and SPO.	There should be only one person accountable for the information to reduce the misuse of the information
APO 07.02.04	Capacity planning function in the Information Security Department, Infrastructure Architecture, and capacity analysis in Feasibility Study were not done since Human Capital makes no detail plan.	The further risk is unknown.	Even though the Human Capital made the detail plan, the result should be informed to other division as well so required action can be made to minimize possible risk.
APO 07.06.07	There was review draft that was done by the project team, however the procurement division did it as well, it can make different decisions and opinions are possible to occur.	There's a high probability of different decision/solution due to more than 1 division made the decision	The review should be made by only one division so the decision is unanimous.

Table. 1 Shows the impacts and recommendations that were found in the questionnaires by COBIT 5.0 that were distributed in several divisions at PT. X such as, IT, Internal Audit, and Human Capital Business Partner.

Table 2

No	PROBLEM	EFFECT	RECOMMENDATION
1	No guidance for taking training on Easy tools system.	Employees could took the wrong training that could make them unable to maximize their capabilities	A big company like PT X should start giving guidance in order to increase the capabilities of current employees
2	Every unit in IT is having trouble to finish projects on time because of lack of quality and quantity of employees	If there are any additional projects, every unit will be overloaded due to the lack of resources	Start mapping resources and requiremets for each projects on the beginning of the year as precaution for additional projects in the future
3	All program are made from vendor.	IT division/department only reads and understands coding	Programmers should work on at least 1-2 projects in a year in order to maintain their skills.

Table. 2 Indicate the effects and recommendations that were discovered in the interview result and were answered directly by IT divisions, Internal Audit, and Human Capital Business Partner in PT. X.

Table. 3

	1ST LEVEL	2ND LEVEL	3RD LEVEL	4TH LEVEL	5TH LEVEL
APO 07	93.69	96.59	82.5		
APO 09	91.35	97.04	92.75	84.1	

Table. 3 Represent the process calculation of APO 07 (Manage Human Resource) and APO 09 (Manage Service Agreement).

CONCLUSION

After doing measurement on Manage Human Resource and Service Agreement, therefore we came up with a conclusion that at APO 07 Fully Achieved in level 2 and named Managed Process. In this stage, organization was performing the IT process and it was well managed in achieving the goal, hence there was a better mark. The management includes few processes are, planning, evaluation, and adjustment toward improvements, whereas APO 09 Fully Achieved was on level 3 and named Establish Process. Hereby, organization had standardized IT processes within the entire organization.

APO 07 (Manage Human Resource) and APO 09 (Manage Service Agreement) hardly reach level 5 since there were few unsolved problems, as follows:

1. There is a function of resource planning and monitoring that didn't go well in arranging employees' needs in the beginning of the year based on the employees' capabilities.
2. No maximum works in IT division, due to outsource personnels that are used.
3. PTO and SPO processes were not depending on 1 person, therefore many people could see the documentations.
4. Capacity planning function in the Information Security Department, Infrastructure Architecture, and capacity analysis in Feasibility Study were not done since Human Capital makes no detail plan.
5. There was review draft that was done by the project team, however the procurement division did it as well, make different decisions and opinions are possible to occur.
6. No guidance for taking training on Easy tools system.

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