A Case Study in PT. XYZ: Aligning Capacity of Information Technology Human Resources in the Headquarter and Subsidiary Office using IT Governance Framework

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ABSTRACT
In this paper will be explained about a Multi-National Company which have many branch offices around the world and the company has developed and implemented a new approach to strategic planning that better aligns all activities and competency with the corporate business goals. Information Technology employee has to improve their knowledge and competency regarding to technology innovation (C. Casado-Lumbreras, 2013). Hopefully this paper could be the initial framework to realize Capacity Building for Information Technology Resources in companies or any other agencies.

Keywords: Information Technology, BSS/OSS (Business Support System/Operation Support System), Capacity Building
1. Introduction

The fast growth of the propensity of globalization, developing an international human resource corporation to help a multinational company to expands their global business. The challenge in human resources is to reduce the gap of knowledge and competency among the employees. A Multinational companies usually have different types of selection of employees depending on whether candidates are from the home country, the host country, or a third county. (Y. Lee, 2011)

Since we know that the economy in Asia Pacific is quite dynamic in recent years occurred where high economic growth and our largest customer in the world located in Indonesia as well then there is a good reason to put Indonesia as one as Development Centre in this regional. The benefits of using local employees to staff international subsidiaries are local employees have familiarity with the socioeconomic, political and legal local country and with business habit in the host nation.

Our new approach strategic planning to perform capacity building is to use COBIT framework. COBIT framework is used to monitor the existing or future maturity level for identified the current capabilities, to identification the gap of knowledge and personnel capabilities as well and to develop the transformation plans as agreed by the global road map Information Technology Company (A. Rafeq, 2010).

2. Capacity Building base on COBIT Framework

Capacity building is a conceptual way to deal with development that spotlights on comprehension the snags that hinder individuals, governments, worldwide associations and non-administrative associations from understanding their advancement objectives while upgrading the capacities that will permit them to accomplish quantifiable and economical results (D, Eade, 1997).

2.1. Capacity building the branch resources

To perform capacity building there are several aspect should be considerd to, which are as follow:

- **Planning phase;** in this phase is to collect all the competency and skill set of human resources, they are interest and expectation in the future.
- **Collect all resources competency,** we can identified the knowledge gap with HQ resources So for the improvement or reduce the gap we can perform transfer knowledge by HQ personel or conducting training in Indonesia.
- **Conducting knowledge transfer or training,** the next step is to monitor the competency the resources whether already enough to involved in the development or project.

To monitor all of those activities, a framework is needed so that the whole activity will runs as good as it can be. COBIT 5 is one of the frameworks that can be used to monitor this activity.
2.2. COBIT 5

2.2.1. COBIT 5 Framework

COBIT 5 provides a comprehensive framework that helps companies to achieve their goals and deliver value through effective governance and management of enterprise IT. Basic understanding, COBIT 5 helps companies to create optimal value from IT by maintaining a balance between realising benefits and optimising risk levels and resource use. COBIT 5 enables information and related technology to be governed and managed in a holistic manner for the entire enterprise, taking in the full end-to-end business and functional areas of responsibility, considering the IT-related interests of internal and external stakeholders. The COBIT 5 principles and enablers are generic and useful for enterprises of all sizes, whether commercial, not-for-profit or in the public sector (ISACA, 2012).

Five principles of COBIT as follow (P. Bernard 2012):

![Figure 1. COBIT 5 Framework.](image)

1. Meeting Stakeholder need
   - COBIT have a standard of guidance on governance and management of management IT, and very flexible to be implement in every enterprises.
   - Compatible with the latest version others standard framework

2. Covering the enterprise end-to-end

The governance objective for any enterprise is to create value on the customer’s perceptions, preferences, and desired business outcomes. Enterprise have many stakeholder, every stakeholder have different needed and objective so Governance should manage the interest of each stakeholder. The governance objective having three element which are ads follow :
   a. Governance enablers
   b. Governance scope
   c. Roles, activities and relationships
3. Applying a Single, Integrated Framework

Since IT have many standard and framework that can be implement in One enterprise, COBIT have capability to align with others framework for governance and management of IT.

4. Enabling a Holistic Approach

As enabler, COBIT should have manage effective governance and management system in IT enterprises environment. Enabler mean anything that can help to achieve the governance objective of company, which are includes many resources such as funding, applications, infrastructure, information, and people. COBIT have seven categories of enabler, which are as follow :

- Principles, policies, and frameworks
- Processes
- Organizational structures
- Culture, ethics, and behavior
- Information
- Services, infrastructure and applications
- People, skills, and competencies

5. Separating Governance from Management

COBIT 5 makes a clear discrepancy between governance and management. Below the explanation about the basic discrepancy from the view of framework governance and Management.

- Governance, It’s related to the method and technique that possible for several stakeholder in one enterprise to have systematic arranged say in evaluation condition and options, monitoring performance and compliance, etc.
- Management, It’s regarding to requirement to use of all the properties (resources, people, processes, etc.) to reach the desired one.

2.2.2. COBIT 5 Process

The COBIT 5 framework divided the governance and management process to be two main area which are governance and management domains (C ISACA, 2012).

- Governance, having five domains governance processes (See figure 2 – COBIT 5 Process Models)
- Management, having four domains which are in line with the responsibility areas of PBRM (an evolution of the COBIT 4.1 domains), and they provide end-to-end coverage of IT.
Figure 2. COBIT 5 Process Model.

To determine the COBIT process used for capacity building, it is important to highlight the most important process that involved in that kind of process. From literature review the selected process are:

- Evaluate, Direct and Monitor (EDM04 Ensure Resource Optimisation)
- Align, Plan and Organize (APO07 Manage Human Resources)
- Built, Acquire and Implement (BAI08 Manage Knowledge)
- Monitor, Evaluate and Assess (MEA01 Monitor, Evaluate and Assess Performance and Conformance).

The detail process based upon COBIT 5 Enabling Documentation are as followed:

EDM04 Ensure Resource Optimisation
- To make sure all the required resources (such as human, devices, software, etc) needed by company can fulfill with the best way, with optimum cost as well and there is benefit that company can get and change in the future.

| IT-related Goal                      | Related Metrics                                                                 |
|-------------------------------------|---------------------------------------------------------------------------------|
| 09 IT Agility                       | User satisfaction will growth due to IT respons related to new requirement, development or implementation of system |
| 11 Optimisation of IT assets, resources and capabilities | Will save the cost for the new development if the company would like develop new version of system or new implementation Will maximum utilize the human resources |
16 Competent and motivated business and IT personnel

IT personnel skill will be updated due to training and enhancement for the new development of system

APO07 Manage Human Resources

- Table 2. APO07 IT Related Goal.

| IT-related Goal                                      | Related Metrics                                                                 |
|------------------------------------------------------|----------------------------------------------------------------------------------|
| 01 Alignment of IT and business strategy             | • Will increase user and business satisfaction due to scope planning of programs and services |
| 11 Optimisation of IT assets, resources and capabilities | • Will save the cost for the new development if the company would like develop new version of system or new implementation  
  • Will maximum utilize the human resources |
| 13 Delivery of programmes delivering benefits, on time, on budget, and meeting requirements and quality standards | • Will deliver the projects on time and with the budget  
  • User and management will satisfaction with the quality of the projects  
  • Cost of System maintenance vs all system project development and implementation |
| 16 Competent and motivated business and IT personnel | • IT Staff skill will sufficient for the competency required with their role  
  • IT Staff will happy with their role |
| 17 Knowledge, expertise and initiatives for business innovation | • User and management will satisfaction with the staff innovation |
BAI08 Manage Knowledge

- **Table 3 BAI08 IT Related Goal**

| IT-related Goal | Related Metrics |
|-----------------|-----------------|
| 09 IT Agility   | • User satisfaction will growth due to IT respons related to new requirement, development or implementation of system |
| 17 Knowledge, expertise and initiatives for business innovation | • User and management will satisfaction with the staff innovation |

![BAI08 RACI Chart]

2.2.3. Perform Human Resources Capacity Building

After all process interview, and formulation is done, the next step is to perform capacity building for the human resources. Based on the personal assessment result and interview with the Accountable and Responsible person in BAI08 process. The example result is as followed.

**Table 4. Examples list of current competency and skill employee.**

| No | Name       | Position     | Skills                   | Tools/Language          | Proficiency (0-10) | Note |
|----|------------|--------------|--------------------------|-------------------------|--------------------|------|
| 1  | Budi       | Programmer   | Programming              | Java 1.6 or Greater     | 4                  |      |
|    |            |              |                          | C & Pro*C 10G or Greater|                    |      |
|    |            |              | Software Development     | Oracle FORMS / REPORTING | 6                  |      |
|    |            |              | Frameworks               | Hibernate 3             | 3                  |      |
|    |            |              |                          | FLEX & FLEX BUILD 4.5   | 3                  |      |
|    |            |              |                          | Cognos                  | 2                  |      |
|    |            |              | Certification            | PMI                     |                    |      |
|    |            |              |                          | TOGAF                   |                    |      |
|    |            |              |                          | Java                    |                    |      |
|    |            |              |                          | TIL                     |                    |      |
| 2  | Joko       | Business Analyst | Programming              | Java 1.6 or Greater     | 5                  |      |
|    |            |              |                          | C & Pro*C 10G or Greater|                    |      |
|    |            |              | Software Development     | Oracle FORMS / REPORTING | 7                  |      |
|    |            |              | Frameworks               | Hibernate 3             | 2                  |      |
|    |            |              |                          | FLEX & FLEX BUILD 4.6   | 3                  |      |
|    |            |              |                          | Cognos                  | 1                  |      |
|    |            |              | Certification            | PMI                     |                    |      |
|    |            |              |                          | TOGAF                   |                    |      |
|    |            |              |                          | Java                    |                    |      |
|    |            |              |                          | TIL                     |                    |      |
After conducting training or course and certification, the expected result as follow:

Table 5. Examples list of After capacity building competency and skill employee.

| No | Name       | Position     | Skills          | Tools/Language         | Proficiency (0-10) | Proficiency After Training | Note |
|----|------------|--------------|-----------------|------------------------|---------------------|-----------------------------|------|
| 1  | Budhi      | Programmer   | Programming     | Java 1.6 or Greater    | 4                   | 9                           |      |
|    |            |              | C & Pro/C SC 3OG or Greater | 8                   |                      |                             |      |
|    |            |              | Software Development | Oracle FORMS / REPORTING | 6                   | 8                           |      |
|    |            |              | Frameworks     | Hibernate 3           | 3                   | 7                           |      |
|    |            |              |                 | FLEX & FLEX BUILD 4.6 | 3                   | 6                           |      |
|    |            |              | Certification  | PMP                   | 2                   | 5                           |      |
|    |            |              |                 | TOGAF                  |                     |                             |      |
|    |            |              |                 | Java                   |                     |                             |      |
|    |            |              |                 | ITIL                   |                     |                             | Yes  |
| 2  | Joko       | Business Analyst | Programming | Java 1.6 or Greater | 5                   | 8                           |      |
|    |            |              | Softw             | C & Pro/C SC 3OG or Greater | 7                   | 7                           |      |
|    |            |              | Frameworks     | Hibernate 3           | 2                   | 7                           |      |
|    |            |              |                 | FLEX & FLEX BUILD 4.6 | 3                   | 6                           |      |
|    |            |              | Certification  | PMP                   | 1                   | 7                           |      |
|    |            |              |                 | TOGAF                  |                     |                             |      |
|    |            |              |                 | Java                   |                     |                             |      |
|    |            |              |                 | ITIL                   |                     |                             | Yes  |

Figure 1. Statistic problem and complain receive in 2014 (Before training).

Figure 2. Statistic problem and complain receive in 2015 (After training).
3. Methodology

There are two methods that human resources capacity building can help company goals. The methods are as follow (Yamoah, 2014):

a. Training
The effective training could improve job performance of employee. Training could be given through different methods such as on the coaching and mentoring, peers cooperation and attending formal course (Elnaga and Imran, 2013)

b. Empowerment
Give a discretion or freedom in a certain related task or activities (Ongori and Shunda, 2008), so employee able to that task or job given.

With the methods above will increase the capacity and expertise of Information Technology resources in branch office to the same level with Head Office resources and the company can reduce the fee of man days as well since Indonesian man days is cheaper than Headquarter.

4. Benefits and concerns
There are some factors that are considered as Benefits and Concerns when a company is implement capacity building

4.1. Benefits
• The increased of capacity and expertise employee will increased the company’s productivity
• Re-location research and development to Indonesia from Europe will reduce the budgeting cost

4.2. Concern
• To reduce the gap of knowledge will takes time since every individual have different capability to get the knowledge

5. Conclusion and future works
By implement capacity building, The company will be ready to re-located some of research development from Headquarter in Europe to subsidiary in Indonesia, which is mean will reduce the cost budgeting for the employee and make the product and services more better as well since the main of customer located in Indonesia.

References
Casado-Lumbreras, C., Colomo-Palacios, R., Hernández-López, A., & Soto-Acosta, P. (2013). “Personnel Performance Appraisal Coverage in ITIL, COBIT, and CMMI: A Study from the Perspective,” Gov. Commun. Innov. Knowl. Intensive Soc., 77

Bernard, P. (2012). COBIT® 5-A Management Guide. Van Haren
Eade, D. (1997). *Capacity-building: an approach to people-centered development*. Oxfam

Elnaga, A., & Imran, A. (2013). “The effect of training on employee performance,” *Eur. J. Bus. Manag.*, 5(4), 137–147.

ISACA. (2012). “The COBIT 5 Introduction,” *ISACA Press*

ISACA, C. (2012). “5-Enabling Processes,” *Roll. Meadows IL*, 60008

Lee, Y. (2011). “Developing international human resources firms,” *Int. J. Bus. Soc. Sci.*, 2(9)

Ongori, H., & Shunda, J. (2008). “Managing behind the scenes: employee empowerment,”

Rafeq, A., CISA C., & CIA F., (2010). “Using COBIT for Assessing IT Process Maturity: A Case Study,” *COBIT Focus Using COBIT Val IT Risk IT ITAF*, 4(1)

Yamoah, E.E. (2014). “The Link between Human Resource Capacity Building and Job Performance,” *Int. J. Hum. Resour. Stud.*, 4(3), 139