

Design of Carry Over Process in SAP Funds Management Module using SAP Activate Methodology for Capital Expenditure at PT. Telekomunikasi, Tbk

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Abstract: Carry over is the right to use the unspent budget during the time period which was originally planned. SAP offers a carry over function that is carrying budget for commitment and residual budget from the previous fiscal year to the next fiscal year. However, it didn't meet the needs of the user, especially for capital expenditure. In PT. Telekomunikasi Indonesia, Tbk, carry over is a re-budgeting process for multi-year programs and what the user wants is to carry open commitments without its budget so the carry over program will consume the allocated budget in the next fiscal year. The purpose of this research is to solve the above-mentioned issue. The result of the research is a design of carry over process in funds management module using SAP Activate methodology and a report that able to distinguish between the carry over budget and carry forward budget.

1 INTRODUCTION

The scale and complexity of the business that runs by a company will surely affect its performance level. Besides, it is commonly believed that to design and run a business the performance of the company is usually seen from customer satisfaction, therefore the role of information technology is considered as the core component that helps companies to achieve superiority in competitive competition (Rerung, 2018). Information Technology played a vital role and it cannot be ignored. However, investment in information system will cost a lot and has considerable risks. For those reasons, the company needs to determine the right information technology to meet their needs. Mulyani said that the Enterprise Resource Planning system is able to integrate all of the subsystems in a company in order to face a competitive competition (Mulyani et al., 2017).

PT. Telekomunikasi Indonesia, Tbk which is a state-owned company promotes the synergy between the state-owned companies by implementing an ERP system in BUMN Karya. Among all of the ERP software, PT. Telekomunikasi Indonesia, Tbk chose to use SAP R/3 which is fully integrated with all business function including human resources, logistics, material management, financial accounting and many more. Based on the research that had been done be-

fore, a large company with complex processes and many departments will receive more benefits from implementing an ERP system, because the system prevents information bias, wrong perception and help the company to make a better decision faster (Widiyanti, 2013). The use of SAP is able to reduce paper usage, expenditure, and printing costs by 33% and improve the company processes (Khoualdi and Basahel, 2014).

During the implementation of SAP, the company spent a lot of money. In addition, the business activities that ran by Telkom Group are increasingly growing and changing along with the rapid development of information technology. While running its business, not all the business processes in the company can immediately run in accordance with the implemented system. The problem arises while the company transferring the budget using the funds management module, especially for the capital expenditure. Capital expenditure is expenditure for the procurement of goods and/or services in the form of new development and improvement of the company assets' quality. When the company wants to perform budget carry over process, which is a process of re-budgeting a multiyear program or investment program of the previous year and wants it to be continued to the following year, the open commitment documents that carried to the next fiscal year are still attached with its budget, though

the carry over process in Telkom is carrying only the open commitment documents without the budget so it will consume the allocated budget in the next fiscal year. Though the SAP offers a carry over function that carries the budget for commitment and residual budget, however, it didn't meet the needs of the user. Hence, the user needs to perform the return budget process, which is not effective. Moreover, because while carrying items, the budgets are still attached the user found it difficult to distinguish between the carry over and carry forward because the system considered these two budgets entering the same budget type after the carry process. Those above-mentioned issues cause the delays of the year-end closing.

Based on those issues that have been described in the previous paragraph, further research is needed, mainly in the funds management module and its functions so that the company can optimize its business processes. Therefore, the existing business processes need to be redesigned based on the requirement of the company. The right methodology for this research is SAP Activate, a methodology with a unique combination of SAP best practice, methodology and guided configuration so the company can build the systems faster and run them simply. The right solution to resolve the problem in PT. Telekomunikasi Indonesia, Tbk is by redesigning the budget carry over process in the funds management module using the SAP methodology.

2 LITERATURE REVIEW

2.1 Enterprise Resource Planning (ERP)

According to Surjit, Rathinamoorthy & Vardhini, Enterprise Resource Planning (ERP) is a business process management that gives the company to use a system that is integrated with various applications to regulate their business and automate functions related to technology, services, and human resources (Surjit et al., 2016). According to Ganesh, Mohapatra, Sivakumar & Anbuudayasankar, Enterprise Resource Planning is a tool that can help the company to plan, schedule and integrate suppliers and customers (Ganesh et al., 2014). Enterprise Resource Planning according to Elbardan & Kholeif is a management system that contains a set of integrated software that is used to integrate all of the business functions that exists in the company (Elbardan and Kholeif, 2017). From all of the ERP definition mentioned above, it can be concluded that Enterprise Resource Planning

is a system that helps the company both to integrate the main processes and coordinate information between business area so that they can support the business processes to be better in the future. ERP system has the capacity to simplify processes that are slow and time-consuming in the company (Parven and Maimani, 2014).

2.2 Systems, Applications, and Product (SAP)

SAP stands for "System, Applications, and Products in Data Processing". SAP is a software that is tightly integrated with each other so that every transaction that runs in a module will automatically affect other related modules (Sampat, 2015). SAP supports the company's main business processes and functions (Boeder and Groene, 2014). According to Okungbawa, SAP is used by nearly 500 companies around the world as a solution for processing operational data and making real-time reports so it can help management levels to make good decisions appropriately and enable them to manage the company's business processes effectively and efficiently (Okungbawa, 2015). The main goal of SAP is to improve and simplify internal business processes which are sometimes require reengineering process (Junnarkar and Verma, 2017). SAP allows the company to run modules individually and adjust the system according to the requirements of the company (Khan, 2017).

2.3 Material Management

The Material Management module is a part of the logistics system in SAP that is connected with Production Planning, Plant Maintenance, Warehouse Management, Sales & Distribution and Logistics Execution (Sedgley and Jackiw, 2002). This module is designed to provide information, tracking and managing the materials that are being moved, stored and sent outside the company (Ahmed, 2014). According to Jost, the following is an explanation of several processes in Material Management that will be used in the carry over process:

1. Purchase Requisition
This document is a request from a particular department to the purchasing department to provide a certain amount of services or materials.
2. Purchase Order
This document is sent to an external business partner that contains material details and quantities.

2.4 Funds Management

The funds management module can support the users to create a budget with several functions that replicate a company's financial structure for the process of planning, monitoring, and managing the company's finance. Three important tasks in this module including budgeting revenues and expenditures, funds movement monitoring, the swelling budget's potential monitoring (Kale, 2014). This module is integrated with the project system module and material management module.

2.5 Budget Carry Over

Carry over is the process of transferring funds or allocations that are not used in the previous fiscal year to the next fiscal year. This form of expenditure allows the company to use the previous fiscal year's allocation for their programs in the next fiscal year with a number of restrictions (for Economic Co-operation and Development, 2014).

3 RESEARCH METHODOLOGY

SAP offers new solutions that have been created based on a proven approach and SAP experience in providing a smart and consistent methodology for all applications called SAP Activate. SAP Activate is a modular methodology and can be used to implement and migrate SAP systems. SAP Activate is also a unique combination of SAP best practices, methodology and guided configuration (Singh, 2017). SAP Activate consists of six phases, they are discover, prepare explore, realize, deploy and run (Kraljić and Kraljić, 2018). This methodology allows companies to build system quickly and run them simply while continuing innovation in the cloud (Basavanthappa, 2015).

The following is the descriptions of the SAP Activate Phases (Musil, 2016) in Figure 1 :

1. Discover

The discover phase is a stage where the scope of the project is defined. This research is conducted at PT. Telekomunikasi Indonesia, Tbk and the focus is to solve the existing problem and fulfill the requirements of the user for carry over process.

2. Prepare

The prepare phase is the stage where the plan and scope of the project have been established. This phase consists of 2 stages, first set up and enablement where the access to the server and sandbox system are prepared and second as-is business

process analysis where the lack of current business process is analyzed. The sandbox system that will be used is SAP Production Simulation.

3. Explore

After the sandbox system and access have been prepared, Fit/GAP analysis will be performed to validate the solutions and identify the requirements according to the analysis that had been done before. In addition, there will also be a business process design. There are 2 stages, first is Fit/GAP analysis and second is determine the business process.

4. Realize

Before performing the configuration, master data should be defined first. The master data that will be used is Funds, Funds Center, Commitment Item, Financial Management Area, and Work Breakdown Structure (WBS). The funds management module will be configured due to the guided configuration. After that, the system should be tested to check whether the system to check whether it has worked properly as required or not.

5. Deploy

Deploy is the last phase of the methodology used in this research. After the configuration of the system had been done, the system will be handed to the user to check whether the system has met the user's requirement.

This study only used the sap activate methodology until the deploy phase and not all of the steps are implemented and it's been adjusted to the needs of the company. Because SAP Activate methodology consists of best practices and guided configuration, it helps the company to make changes of SAP and using implementation guide in the guided configuration environment that helps the company to find solutions faster and deploy them more quickly. SAP Activate methodology includes ready-to-use reference solutions, documentation, and guided configuration that guides the company to configure the system according to the user's needs. Moreover, it is an agile implementation methodology that helps the company to adapt quickly and its flexibility allows the company to create its own processes and can be adjusted to the user needs via configuration

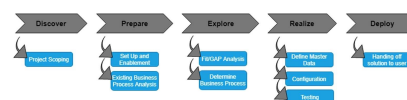


Figure 1: SAP Activate Phases

4 RESEARCH RESULT

4.1 Fit/GAP Analysis

Fit/GAP analysis is intended to find out whether the current business process in the company has succeeded in fulfilling all the needs of the company. Figure 2 is the result of Fit/GAP analysis on the carry over business process at PT. Telekomunikasi Indonesia, Tbk. Note :

- N : the requirements are not fulfilled at all.
- P : the requirements are only partially fulfilled.
- F : the requirements are fulfilled.

No	Existing Business Process	Requirement	Fulfillment			Solution
			N	P	F	
1	The carry over process still carry the budget along with the open commitment documents so that the user needs to perform return budget process	The system allowed to carry open Commitment documents only without the budget to the next fiscal year		√		Configure the system to deactivate budget Carry Forward for Commitment so the open commitment document can be carried without its budget
2	There's no carry over budget column in reporting	The carry over the budget column in the reporting		√		Making a new customized report by adding the carry over column in the report which contains the carry over amount from the previous fiscal year

Figure 2: Test Case for Proceeding Payment.

4.2 Business Process to Be

The business process to be is a proposed business process that has been designed based on the previous fit/gap analysis. The following is the explanation of the business process to be of carry over process described in Figure 3.

The process begins by making purchase requisitions and purchase orders. At PT. Telekomunikasi Indonesia, Tbk, an investment program can be categorized as a carry over program if a purchase order (PO) has been made and there was no good receipt or payment yet in the current fiscal year so the company wants the program to be continued in the next fiscal year. The business unit will check which program

should be carried to the next fiscal year, then propose the carry over investment program and at the beginning of the fiscal year the Investment Committee will review and evaluate the carry over program status. If the proposal approved, the Investment Committee will determine the amount of the Commitment Budget and Payment Budget that have to be provided based on the remaining work which will continue in the following year. The recommendation will be transferred to the Director of finance and if it approved, the Director of finance will sign the contract so that the finance can carry the open commitment documents which are processed until the Purchase Order (PO) through the T-code BCFCO. The proposed business process is to eliminate the phase where the user must perform the return budget process, as a matter of fact, ineffective. This problem will be solved by configuring the funds management module, especially in the closing operations for the budget control system (BCS) so when user perform the carrying process, open commitment documents will be carried without its budget to the next fiscal year and the system will automatically generate a report which shows the total amount of carry over budget. After that, the finance unit can release the commitment and payment budget, and the carry over program will consume the allocated budget in the next fiscal year.

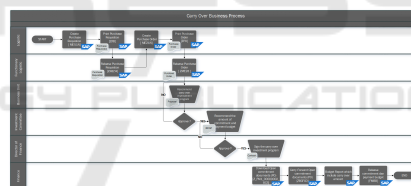


Figure 3: Business Process To Be

4.3 Configuration

The basic configuration on SAP system is done by using the Implementation Guide (IMG) help. It includes adding more columns, changing fields, and other configurations needed as well. There's two way to display the IMG on SAP:

1. Enter T-code: SPRO
2. Access menu path: SAP Easy Access menu → Tools → Customizing → Implementation Guide (IMG) → Execute project.

Below in the Figure 4 is the list of configurations that should be done.

No	Configuration	
1	Closing Operations (BCS)	<ul style="list-style-type: none"> Deactivate "Budget CarryForward for Commitment" (current fiscal year 9G: not active, current fiscal year 9F not active) Define Budget Entry Documents for Commitment Carry Forward (Settings for receiver lines, Settings for sender lines) Define Budget Types (Carry For. Sender and Carry For Receiver)
2	Report (Customization)	<ul style="list-style-type: none"> Make a new report program Adding column carry over budget to report Get the carry over value from joining FMBDT (budget total), EKKN (acc assignment in purchasing document) and EKPO (purchasing document item) table

Figure 4: Configuration.

Figure 5: Carry Over Report

After doing the configuration and customization, the system needs to be tested to check if the program works correctly. The result is user now can perform the carry over process and the budget for commitments aren't attached with its document, so the return budget process is no longer needed. After that, the system will automatically generate a report as shown in Figure 5.

5 CONCLUSIONS

PT. Telekomunikasi Indonesia, Tbk receives pretty much benefits by using SAP, but while running its business, the company still facing several obstacles. It was particularly difficult to adjust the existing business processes on the system perfectly. Currently, when the company wants to perform carry over process, the system still carrying the open commitment documents with its budget, so the user has to perform the return budget, which is ineffective. The carry over program in Telkom is supposed to consume the allocated budget in the next fiscal year, but because of

the existing system's configuration, the budget is still attached so the consumable budget of the next fiscal year will be decreased and it won't consume the budget. In addition, the user wants to distinguish between the carry over budget and carry forward in reporting. Therefore, some changes are needed. After the analysis of this research, the author has some recommendations to propose. First, to eliminate the return budget process, PT. Telekomunikasi Indonesia, Tbk has to configure the funds management module, especially the closing operations part. In order to allow the system carrying the open commitment documents only without the budget, the budget carryforward for commitment setting for the sender fiscal year must not be active. It can be done by using the Implementation guide (IMG) help, by entering the T-code SPRO in SAP. After the configuration is done, the carry over program will be carried without its budget and will consume the allocated budget in the next fiscal year. Second, in order to display the desired contents in the report such as carry over budget, the company has to create a customized reporting, which can be done by creating a new reporting program and joining FMBDT, EKKN and EKPO table in order to get the value of carry over program. Hopefully, those recommendations will help the company in solving their concerns so the business processes will run better.

However, this study has potential limitations. First, PT. Telekomunikasi Indonesia has been implementing SAP, therefore the focus of this study is only to fulfill the requirements of the user. Second, the methodology used in this study is SAP Activate that has been adjusted to the needs of the company and not all of the steps are implemented. Last, the solutions offered are based on SAP best practice and guided configuration. For further research, future study can implement SAP Activate methodology until the last phase which is run. Future study can also do more configuration or customization related to funds management module to make carry over process more effective.

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