

# Analysis Implementation of Activity-Based Budget for Planning and Control of Direct Labor Costs on the Inpatient Department (Case Study at XYZ Hospital)

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## Abstract

The research began with a request from the board of directors where researchers working at the hospital asked to prepare a budget based on activities. In addition, the competitive conditions in the hospital industry triggered by various factors require a complete change in the application of management principles in each hospital. Changes in organizational structure, for example, aim to allow flexibility, create a cross-functional team that focuses on patient satisfaction. Changes in human resource management have resulted in performance-based management replacing the function-based management that executives knew and used in the past. This activity-based management requires hospital managers to change the method they use for budgeting, from functional-based budgeting to activity-based budgeting.

**Keywords:** Activity Based Budgeting, Planning and Controlling, Direct Labor Costs.

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## INTRODUCTION

The application of Activity-based budgeting or (ABB) in the business world is one approach to making activity-based budgets. This approach is a process of planning and managing activities that are expected to be cost-effective within the budget, thereby achieving the expected workload and agreed strategic objectives. Activity-based budgeting is a budgeting process that focuses on improving the systems that organizations use to create value for their customers (Antos and Brimson, 1999) and processes that are an integral part of the organization (McClenahan, 1995), and focuses on the process of planning and controlling activities. Desired from the organization to achieve a cost-effective budget to meet the workload in accordance with the strategy and goals of the organization (Antos, 1997).

However, some companies still use the traditional budget method, including the hospital business. Most hospitals in preparing plans to determine operational costs, especially inpatients, still use Incremental budgeting which focuses on functional

which is intended to estimate the amount of target costs that need to be incurred by certain features during the budget period. So that hospital management has difficulty in identifying problems. Companies that rarely innovate often use incremental budgets, and these companies are very vulnerable to change (Brimson and Antos, 2008).

## LITERATURE REVIEW

Activity-based budgeting is a new approach to the budgeting process. This approach is the process of planning and managing activities that are expected to be cost-effective within the budget, so as to achieve the expected workload and agreed strategic objectives. Activity-based budgeting is a budgeting process that focuses on improving the systems an organization uses to create value for its customers (Antos and Brimson, 1999) and processes that are an integral part of the organization (McClenahan, 1995), and focuses on the planning and control processes of activities. expected from the organization to achieve a cost-effective budget to meet the workload in accordance with the goals and strategies of the organization (Antos, 1997).

While activity-based budgeting can be applied to any organization and function, including service and overhead firms, the concept was pioneered in manufacturing firms (eg, Bacon and Newberry, 1994; Antos and Brinson, 1998). The new challenge requires all commercial and non-commercial organizations to focus on overall costs.

Activity-based budgeting differs significantly from traditional budgeting.

The main difference between activity-based budgeting and traditional budgeting is the amount of information required for budgeting.

#### Activity-Based Budgeting Principles

Amin (2003:6) explains several principles of Activity Based Budgeting (ABB), including:

1. ABB is able to describe the work, activity or business process that is carried out, not a cost element. The cost element or required resources must be based on the activity or business process and the expected workload. Workload is the number of units of activity required. For example, in the Human Resources department, the workload for a "staff hire" job is to employ 30 people. The costs of carrying out these activities are salaries and other costs including recruiter allowances, advertising, travel, testing, office equipment, and the building occupied by recruiters and interviewers. If the work plan is cancelled, the workload for this activity will be zero.
2. ABB must be based on future workloads to meet customer needs, departmental/organizational strategies and objectives, services and combinations of new or modified services (service mix), increased effectiveness and efficiency, business process changes, service level changes (service level), flexibility, quality, and cycle time.
3. The final budget should describe changes in resource costs (costs resource).
4. As part of the budgeting process, businesses need to pay attention to continuous improvement efforts. Each department must define the activities or business processes for improvement, the amount of improvement, and how to plan to achieve the improvement goals.

According to Yunita Anggarini and Gunawan Adisaputro (2007:375), there are three basic principles of ABB, namely:

1. Activity based budgeting focuses on understanding activities and how these activities are related to the achievement of strategic goals.

Activity-based budgeting begins with management defining the strategy, vision, mission, and product/service value proposition. Based on customer requirements analysis, market and competition

knowledge, develop strategies to determine the value that can be provided to customers. Through several stages, this strategy is defined to support performance attributes that imply value for the product/service. A cascading process can be used to determine how strategy should be reflected in processes and activities.

To achieve its vision, the company must identify various strategic projects that lead to key areas. If the strategy focuses on the processes that matter, success will be achieved. Through feature costing, activity-based budgeting defines different processes with respect to the unique requirements and conditions (features) of each product/service. By combining ABB with feature costing, organizations can develop a value-driven planning.

2. Activity-based budgeting focuses on value creation.

Value can be created when the customer is ready to use the product/service. Goals needed to create value:

- a. Market share growth/gain

This can be done by introducing new products/services, opening new sales territories, positioning the company in a particular niche, developing joint operations with other companies, and taking over competitors' businesses.

- b. Increased profit margin

To create value, employees must increase their income and lower their costs to increase profits.

- c. Increased sales growth rate

This can be done through new offerings or continuous improvement of the products and services offered by customers.

- d. deduction

## METHODOLOGY RESEARCH

This type of research uses an exploratory descriptive method with a qualitative approach. Researchers try to describe phenomena or symptoms that are happening and are studied naturally. According to Bandur (2014:41), exploratory research is research conducted to find out certain reasons for a topic or want to know what is happening on a topic. For this purpose, we conduct exploration or it can also be called exploratory research.

The main purpose of descriptive research is to provide demographic information about the respondents and to discuss issues arising from the research topic. This study seeks to find, information, find out, describe or explain how the budgeting process as a planning and cost control tool includes variable cost data, fixed cost data, supporting data for patient days, supporting data for the number of inpatients.

Based on the data from several experts above, it is concluded that exploratory descriptive research is a series of observation activities to find causes that affect real phenomena that occur in hospital conditions, gain an understanding of these phenomena and find the best solution to overcome the problems that occur.

The research method used in this research is a case study. Qualitative data obtained from the general description of the company in the form of history, vision and mission of the company and organizational structure. This research was conducted at XYZ Hospital, located in Jawa Barat.

This research data uses primary data and secondary data. Primary data was obtained from interviews with the Division Head and all parties involved in the company's budget preparation process. Meanwhile, secondary data was obtained from the collected evidence, literature review about the excess budget based on activity, previous research and other literature related to the problems discussed in this study such as the weaknesses of traditional budgeting, activity based budgeting, cost reduction and value creation. In this study, data collection techniques consist of:

#### 1) Interview

According to Mukhtar (2013: 118), the interview is a question and answer process between researchers and informants or research subjects in a social context. The interview was conducted with a series of questions that the researcher had prepared based on the formulation of the problem and would be answered during the research interview.

Interview is a process of getting an explanation to get information by using question and answer method, either directly or indirectly, face to face. According to Sujarweni (2014:31), interviews are information or evidence of information obtained through other data collection methods.

#### 2) Live Observation

Researchers made direct observations on the object of research, through participating in elements of activities related to budgeting, especially the process of recording hospitalization.

#### 3) Documentation

Documentation consists of obtaining direct data from the research location, including supporting books, activity reports, regulations, documentary films, photos, and data related to research (by Sudaryono 2018: 219). Documentary research complements the use of questionnaires, observations, and interviews in qualitative research.

Meanwhile, according to Mukhtar (2013: 119), documents are supporting data collected by strengthening observation and interview data. Because

documentation is a collection of data from observations and interviews that were conducted previously, the researcher closes the research report in the triangulation process of three data collected from observations, interviews, and complementary documents.

## RESULTS

In 2019, using the activity based budgeting method, the calculation of salary costs was Rp. 5,537,713,567, - while using the traditional budgeting method of Rp. 6,760,789,543, - so that by using the activity based budgeting method there are savings in salary costs and an increase in profit of Rp. 1,235,373,454,- . Based on the data above, the activity based budgeting method is considered to be able to increase the effectiveness of salary costs in hospital inpatient services. XYZ because it can save salary costs.

## DISCUSSION

The implementation of Activity Based Budgeting by developing a Time-Driven Activity Based Costing model is expected to produce more accurate outputs than traditional budgeting methods.

Activity based budgeting is a budget system whose budgeting is based on activities, namely activities related to the operational costs of inpatient service installations. The steps in implementing activity based budgeting in calculating salary costs for inpatient service installations are as follows:

1. Determine the standard cost of the capacity of each human resource used in every operational process of inpatient services.

The purpose of calculating the standard cost of capacity is to determine the salary costs that should be paid by the hospital in carrying out an activity. The standard cost of capacity can be determined by:

- a) Identify the main activities that require costs in the work process. The main activities for each resource can be seen in the SOP (standard operating procedure) made by each department head.
- b) Determine the approximate amount of time each resource will take to do the job. Develop a time-driven activity based costing system used in the budget emphasizes time as a cost driver for human resources.

2. Calculation of standard cost of capacity, provision of working hours on human resources of inpatient service installation at XYZ hospital. Starting with the calculation of working hours in a week, with the following calculation:

Number of Hours/week (7 days x 7 Hours)= 49 Hours  
 minus 2 days 14 hours holiday  
 Amount After deducting 2 days 35 Hours  
 Convert minutes (34 x 60 minutes) 2,100 Minutes  
 Less rest time (30%) 630 Min

Total after (-) break time 1,470 Minutes

While the calculation of effective working hours per day is as follows:

Number of effective work/week 1,470 Min

Number of days in a week 5 Days

Number of working days in minutes 294 minutes (1,470/5)

After determining the effective working hours, it will be applied to the 2018 and 2019 calendars, as follows:

After determining the effective working hours, it will be applied to the 2018 and 2019 calendars,

The results of the 2018 effective working hours were 1,142 hours and 2019 were 1,147 hours.

After a year's effective working hours are obtained, the next step is to calculate the standard cost of capacity, with the formula:

Standard cost of capacity = total annual income / effective working hours per year.

## CONCLUSION

1. Based on the test results, the determination of salary costs for inpatient services using the traditional budgeting method and the ABB method produces different amounts of salary costs. This is because there are differences in each main activity as a cost driver in the ABB method, while in the traditional budgeting method it is only a fixed cost.
2. The implementation of the salary budget for the inpatient department based on the traditional budgeting method in 2018 was 16% higher and in 2019 it was 18% higher when compared to the salary budget for the inpatient department which was prepared using the activity-based budget method at PT. XYZ. One of the factors that cause the difference in the amount of the budget is because the number of employees in the inpatient department allocated by the activity-based budget method has been reduced by the inpatient department which is under capacity.
3. Activity-based budgets using the TDABC financing method can be a tool for planning and controlling salary costs for the inpatient department at the hospital. XYZ because the TDABC financing method can know and plan the main activities of the existing inpatient department employees and the number of available employees. After the activities of the inpatient department were determined and given a standard time for work, it turned out that there was an excess of allocation for the inpatient department. Cost control for the inpatient department is carried out by reducing the number of inpatient employees who experience under capacity. By controlling the cost of salaries for the inpatient department, the effectiveness and

efficiency of the salary budget for the inpatient department of the hospital will be effective. XYZ, then the hospital's profits can be optimized.

4. The application of the activity based budgeting method can increase the effectiveness of salary costs for inpatient services, because it can prove the existence of savings in salary costs and can increase profits. The use of the ABB method will maximize resources/employees in the operational activities of XYZ Hospital's inpatient services because each cost is charged based on the activities carried out by these resources/employees, so it is quite accurate and will increase cost effectiveness. Some suggestions for further researches are company, (a) The hospital needs to start considering how to calculate salary costs for inpatient services using the ABB method, because the calculation of salary costs for inpatient services using the ABB method uses activities as a cost driver so that it is more accurate and effective than the traditional method. budgeting that only uses fixed costs as the main cost source. (b) The process of budgeting operational costs, especially employee salary costs, requires an activity-by-activity analysis of employee information obtained through interviews and data available to agencies. (c) The application of salary costs for inpatient services must be carried out accurately so that it can provide long-term benefits for hospitals. Determination of salary costs for inpatient services using the ABB method is highly recommended for use at XYZ Hospital, because it can increase the effectiveness of salary costs for inpatient services. And share academics it is recommended to use the object of research in other sub-topics of costing that have not been studied. This is important to improve the accuracy of the results of further research.

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