# **Implementation Proposal of Activity based Costing on the Loans Department: A Case Study in PT. BPR Cincin Permata Andalas**

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Abstract: This study aims to determine the comparison between the result of the implementation proposal of Activity Based Costing (ABC) system on the Loans Department at PT. BPR Cincin Permata Andalas and the proposed implementation of the ABC system with traditional cost allocation system that has been used so far. The research method used is single case study with a single unit analysis by collecting data through observation, documentation, and interviews. The result of the proposed implementation of ABC system can be utilized by PT. BPR Cincin Permata Andalas as recommendation to arrange the next strategy. Results from this research shows the different calculation of overhead costs with traditional cost method and ABC. ABC system describes cost information reliable for calculating the cost of each customer better.

## **1** INTRODUCTION

The soaring competition leads companies engaged in manufacturing, trading and service industries to be extra careful in managing strategies that can enhance their competitive advantage in order to continue to sustain the competition. The level of competition is due to the ease in getting information and rapid technological developments, so that the opportunity to conduct business activities becomes more open. Competitive advantages cannot be maintained with just the current market share position or resources (Marvianti, 2013). However, companies must be able to make innovations that will later impact the company's profitability and increase competitive advantage.

The rapid change in the business environment is not only influenced by economic conditions but also influenced by customers. The increasing number of competitors makes it easier for customers to freely determine which products and services to choose and thus encouraged companies to set strategies in order to established good relationships with customers.

The financial services industry plays an important role in the development and economic growth of a country, particularly in the banking industry. PT. BPR Cincin Permata Andalas is one of the banks that actively contributes to economic growth in Indonesia, specifically in West Sumatra. PT. BPR Cincin Permata Andalas contributes by channeling funds in the form of loans to local and small business. The provision of credit is based on the prudence principle because it contains some substantial potential risk which can affect the bank's performance. Therefore PT. BPR Cincin Permata Andalas must be able to process, analyze, and assess every credit application to determine that the application is safe, effective and healthy. Hence, PT BPR Cincin Permata needs a cost information from each credit analysis process to get a decent and profitable customer. Raaij (2005) explained that this cost information will be useful in managerial decision making and be as reference for companies in choosing their strategies to increase their profitability. Using Activity Based Costing system is considered capable of tracing the costs arising from each activity influenced by the customer and assigns costs accurately to each customer. The results of the ABC system are expected to be able to provide information to differentiate high-cost customers and low cost customers so that further strategic decisions can be measured.

This research was conducted in the credit department in PT. BPR Cincin Permata Andalas by considering the fact that the most important income is credit interest income. Furthermore, this research is

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expected to be able to provide more accurate cost information on the calculation of credit application fees with ABC compared with traditional cost system.

## 2 THEORICAL FRAMEWORK

Hansen and Mowen (2015) define costs as cash or cash equivalents sacrificed to obtain goods or services that are expected to provide benefits now and in the future for the company. Horngren, et al., (2013) argues that costs are sacrifices or resources used for specific purposes. Different cost for different purposes, which means that each cost classification has different objective in the decision making (Horngren, et al., 2012). Horngren, et al., (2012) classified costs into two; direct costs, which is the cost that directly related to cost objects and its economic value can be easily calculated and indirect costs, which is the cost that associated with product costs but its economic value can not be traced easily.

If the procedure for assigning the costs is wrong, this will lead to a wrong decision taken by management. Tracing coss into cost objects is divided into two methods (Hansen and Mowen, 2015), the direct tracing and driver tracing method. Direct tracing can be perform by identifying costs that specifically related directly to the cost object and thus charged directly into the cost object. Driver tracing is a method of allocating or charging costs by paying attention to the causal relationship between the cost and the cost object. Indirect costs are costs that cannot be traced directly so that it requires a method called cost allocation. Allocation is usually based on assumptions or policies set by management. Horngren, et al., (2012) explains that there are four reasons of why the costs allocation is very important. It is to predict the impact of business decisions, used as a tool to shape the motivation desired by functional managers, to calculate income and assess the cost of assets, and to calculate costs or justifications in spending. Generally there are three cost allocation systems, which are the direct costing, traditional costing, and Activity Based Costing (ABC) systems

Traditional costing system focus on production. costs. This system is also known as volume based costing because the overhead is charged based on volume of the cost drivers (Cooper and Kaplan, 1999). In its development, traditional costing is deemed unable to produce reliable information so Cooper and Kaplan (1999) developed an allocation method based on activities called Activity Based Costing (ABC). Blocher and David Stout (2012) explain that ABC system is a cost allocation system that allocated costs to its cost objects based on the activities carried out for these cost objects, Stout and Propri (2011) mentioned that if ABC implementation is done correctly, it will be able to provide accurate information about costs to management regarding product costs so that the information can be used as a basis for decision making for strategies such as the process of repairing, pricing, and managing customer relationships.

Blocher, Stout, and Cokins, 2012 stated that to gain full closure on the flow of the ABC system, one must understand about activity, resource, driver cost, resource cost driver, and activity cost driver. ABC described a causal relationship between resource, activity and cost object. In conclusion, the assignment of costs according to ABC is done through two stages, namely assigning overhead costs to activities and assigning activities to the cost object using two cost drivers; the resource cost driver and activity cost driver (Blocher, Stout, and Cokins, 2010; Cooper and Kaplan, 1999).

In practice, it is difficult to apply the ABC system to companies and allocate the overhead costs compared to traditional method. ABC requires companies to identify significant activities in their business process. However, the allocation of costs with ABC is considered sufficient enough to provide more accurate information on the overhead cost of the company.

The benefits of the ABC system are 1) ABC is useful to determine the cost of the product more accurately. 2) ABC system is very useful for company management to conduct profitability analysis more accurately, both in profitability analysis of products, customers, processes and departments. 3) ABC can be used as an inventory valuation measure. 4) Appropriate and effective implementation of the ABC system can help companies to manage their activities better, to eliminate activities that do not provide value and improve the quality of the company's internal processes consistently.

The weakness of the ABC system is 1) The application of the ABC system requires the support of resources and adequate information human technology and a long time to socialize to all parts of the company. 2) Identification of causal relationships between company operating activities and production costs requires careful and adequate steps. Mistakes that occur in determining the trigger of activity will bring distorted cost information to management and could cause serious damage. Cooper and Kaplan, (1999) in his research explained how ABC can be used to improve performance in insurance companies. The application of ABC can be used in various service industries such as banks, medical service industries and government departments.

### **3 RESEARCH METHOD**

This research is categorized as qualitative research. Moleong (2015) explained qualitative research aimed to understand the phenomenon of a research object so that efforts can be determined to improve and analyze the phenomenon. The method of data collection in this study was conducted in 3 methods. First is the observation by visiting the object of research directly; Second is the documentation in the form of annual reports, along with other data related to research; and the third is conducting interviews with the director, head of credit and 2 account officers. This research is a single case study with a single unit of analysis and it focused only on one research object. A single case study brings a role to the research used in current management and can provide knowledge valid because this study focuses on one object. The object of this research is PT. BPR Cincin Permata Andalas where its specialty lies on providing loans to its customer.

### 4 ANALYSIS

### 4.1 Allocation Policy Cost at PT. BPR Cincin Permata Andalas

Based on interviews conducted with PT. BPR Cincin Permata Andalas, the calculation of overhead costs for processing a loan is done in a simple way, namely by dividing the overhead costs by the amount of the ceiling loan that has been given

Table 1: Cost Allocation at PT. BPR Cincin Permata Andalas on December 31, 2017 (in Rupiah)

Customer Segmentation	Working capital Loan	Investment Loan	Consumption Loan	Total
Number of plafond	38.779.000.000	12.146.000.000	5.280.834.000	56.205.834.000
Overhead Cost	618.869.272	193.836.514	84.276.178	896.981.964

### 4.2 Development of Activity based Costing at PT. BPR Cincin Permata Andalas

To develop a loan calculation using the ABC system, the steps are as follows:

- 1. Determine all activities of the lending process There are 14 activities includes: marketing; customer data collection and file administration, customer interviews, BI Checking, Making loan portfolio, surveys, reviews of loan portfolio, scheduling agreements, loan approvals, agreements and loan realization. documentation, supervision and loan monitoring, making supervision reports, and handling non-performing loans.
- 2. Determine resource costs

After determining the activities related to lending, the next step is identifying the amount of resource costs to process a loan application. To determine the amount of resource cost, this research has been traced the resources through observation, documents, and interviews. There are 5 overhead costs that have been traced, i.e. payroll expense, education and training expense, rent expense, maintenance expense, and fuel expenses

- 3. Assign resource costs to activities
- 4. Identify activity drivers and assign activity costs on cost objects

This is the last step in the development of ABC in order to search the activity costs to object costs so as it is grouped into one cost pool. The cost pool results at PT. BPR Cincin Permata Andalas are batch level, unit level, and facility level

There are 11 cost pools that are used to trace costs into the cost object. The calculation of the total activity costs found in each cost pool, then these costs are allocated to each customer segment. The following is summary table of the cost pool at PT. BPR Cincin Permata Andalas.

Table 2: Cost pool of the loan process PT. BPR CincinPermataAndalas (in Rupiah)

No	Rated aspect	Category	
1	Number of visits to customers	93.680.163	
2	Number of customers served	62.757.395	
3	Number of customer NPWP	12.657.004	
4	Number of loan portfolio made	25.256.057	
5	Number of reviews conducted	87.099.074	
6	The amount of analysis carried out	73.036.989	
7	Loan agreement	186.509.619	
8	Number of documents recorded	74.362.979	

9	Number of monitoring conducted	170.551.102
10	Number of reports made	23.188.652
11	Number of actions taken	87.882.930
	Total	896.981.965

Source: PT BPR Cincin Permata Andalas which has been processed

#### 4.3 Comparison ABC with Traditional Costing

From the table, the allocation for each customer segment is determined, so the results can be compared to the calculations made by management.

Table 3: Comparison of Overhead Cost Allocation of the Process of Giving Loan in PT. BPR Cincin Permata Andalas (in Rupiah)

Cost allocation	Working capital Loan	Investment Loan	Consumption Loan	Total
Traditional	618.869.272	193.836.514	84.276.178	896.981.964
ABC	636.538.463	171.453.668	88.989.833	896.981.964
Difference	(17.669.191)	22.382.847	(4.713.655)	
Information	Undercosted	Overcosted	Undercosted	

By comparing the overhead costs made on management calculations and calculations according to the ABC system, can be seen that the allocation of costs used by PT. BPR Cincin Permata Andalas all this time is not quite right. This affects the profit of each segment of loan customers at PT. BPR Cincin Permata Andalas. They can also find out that the allocation of costs using the ABC system provides information on which customers are high cost to serve and which customers who are in the low cost to serve.

The working capital loan customers experienced a considerable undercosted amounting to Rp. 17,669,191 from management calculations. Working capital loan customers are customers who are in high cost to serve, because it requires a greater activity cost to process a loan application.

The investment is overcosted quite large, which is Rp. 22,382,847 from management calculations, which is why it is necessary to maximize the loan for investment loan customers.

Consumption loan customers have undercosted not too large because this customer segment is the smallest customer segment of PT. BPR Cincin Permata Andalas. However, consumption loan should also be maximized because they have the potential to provide greater profits.

Based on the activity of the lending process of PT. BPR Cincin Permata Andalas which was developed through the ABC system, it can be concluded that the activities carried out mainly in the field are activities that generate considerable costs, namely marketing, reviewing or surveying, monitoring loan customers, and handling non-performing loans or bad loan. BPR Cincin Permata Andalas can encourage AOs to work more efficiently in conducting loan assessments in the field without ignoring the principle of prudence.

PT. BPR Cincin Permata Andalas held an additional number of AOs, it was expected to accelerate the loan assessment process. The application of ABC can identify which non value added activities and value added. To get around undercosted and overcosted, this research suggests reviewing the duties, functions, and authority of each employee's work.

The ABC system implementation provides an overview for PT. BPR Cincin Permata Andalas that there are costs that should be charged more to customers.

One of the strategy is to charge these costs to customers with provision fees and administrative costs and service fees on the loan process, while collateral valuation by considering high cost of goods sold to reduce the loan risk that will occur. Therefore, the ABC system is recommended for its application to the loan department of PT. BPR Cincin Permata Andalas to produce more reliable cost information.

### 5 RESULTS

The calculation of overhead costs carried out by PT. BPR Cincin Permata Andalas does not reflect actual cost information. The development of ABC system shows that working capital loans and consumption loans are undercosted while investment loan is overcosted. ABC system provides an overview to PT. BPR Cincin Permata Andalas for customers who are high cost to serve and low cost to serve in processing loan

The cost of marketing activities can be reduced by reducing marketing activities in the field by utilizing technology such as social media.

The cost for BI Checking can be reduced by utilizing the latest technology managed by Bank Indonesia, namely SLIK, which requires a shorter check time.

The results of ABC development at PT. BPR Cincin Permata Andalas can find out the costs that should be charged more to customers by increasing fees and administration fees.

### **6** CONCLUSIONS

PT. BPR Cincin Permata Andalas has problems with the cost allocation system, where the cost allocation system that has been implemented to date has not been able to provide accurate financial information in decision making. Costs should be measured precisely to avoid wrong decisions that can affect the level of profit on the bank latter.

PT. BPR Cincin Permata Andalas has not calculated in detail the use of fees for the process of granting a loan. This research was conducted to provide a solution to the obstacles faced by PT. BPR Cincin Permata Andalas by developing the ABC system to allocate costs to operational expenses related to the loan process as of it is expected to be able to produce accurate cost information.

The results of the ABC system development in calculating overhead costs for loan processing, provide information on the rate of fees consumed by each service activity provided to customers.. Compared to the cost calculation carried out by PT. BPR Cincin Permata Andalas, that the ABC system is considered capable to provide information on charging fees to customers so that customers that are more profitable and unprofitable can be identified.

The results of the development of ABC can be used to measure the performance of employees at PT. BPR Cincin Permata Andalas so the effectiveness and efficiency in serving loan can be maximized.

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