

Optimizing School Financial Management with Activity-Based Costing: Case Study at Parlaungan Islamic Middle School

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Abstract. *The business world is currently experiencing very rapid growth, both in manufacturing and services. One form of service business is educational institutions. Educational institutions that are common in society are schools. Schools must be able to provide good-quality facilities so as to produce quality human resources for the next generation. This research aims to purpose of this research is to calculate the tuition fees of Parlaungan Islamic Middle School. The research method used is A qualitative method, descriptive analysis describes the method of determining the SPP rates of Parlaungan Islamic Middle School, which has been applied in the school so far using the Activity Based Costing (ABC) method. From the results of observations that have been made, it can be seen that in determining the SPP rate, the basis for calculation is the Salary of Teachers and Employees. The results of this study indicate that the calculation of the SPP rate of SMP Islam Parlaungan has used the Activity Costing (ABC) method, but in determining the rate results, the school rounds down. This is to make the cost allocation more efficient. The SPP rate determined by the school management is IDR 65,000, but based on calculations using the Activity Based Costing (ABC) method, the SPP rate is IDR 65,909 (rounded up) to IDR 66,000. This causes undercost.*

Keywords : ABC, School Finance, Tuition Rates

1. INTRODUCTION

The current business landscape is witnessing swift expansion, encompassing both manufacturing and service sectors. The overall economic growth, paired with advancements in transportation technology and scientific progress, results in increasingly fierce and intense competition. The economy of a nation relies on its current industries, particularly the service sector, which includes insurance firms, financial institutions, healthcare services, and transportation. Each of these sectors strives to deliver high-quality services to consumers at an affordable price.

A type of service business is an educational establishment. The most prevalent educational establishment in society is a school. Schools that are government-owned are typically referred to as state schools, while others are known as private schools. With the progress of time, an increasing number of investors are entering the education sector, resulting in heightened competition. Educational institutions must be equipped with adequate and high-quality facilities to cultivate skilled human resources for future generations. The success of an initiative in reaching its objectives largely depends on the financial support from relevant stakeholders. In this context, school administration plays a significant role in impacting the effectiveness of a service organization. There is a noteworthy issue to consider in private schools regarding the annual increase in tuition fees. However, this alone is insufficient to serve

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as a reliable criterion for making informed decisions. Effective, in this case, means that the outcomes can be achieved in alignment with the established goals.

The Activity Based Costing (ABC) method is a cost management system that provides comprehensive data about activities, enabling company staff to oversee these activities effectively. The ABC method is founded on the premise that costs are driven by specific causes, which can be managed accordingly. Traditional cost accounting methods produce product costs that can lead to misleading cost information. This misinformation is caused by inaccuracies in how costs are allocated, leading to incorrect cost assessments. Such inaccuracies can result in underestimation or overestimation of product costs. The Activity Based Costing System (ABCS) is a method of cost calculation that initially links costs to activities and subsequently assigns those costs to products.

Parlaungan Islamic School is located in the Sidoarjo district and is recognized as one of the private educational institutions. This school has evolved into a learning establishment by integrating formal education with teachings from Islamic boarding schools. Until now, the school has been employing a method similar to Activity Based Costing for calculating tuition fees. However, the management is not familiar with the specific name of the cost calculation method they have been using. In the process of determining tuition fee increases, the school management aims to minimize these hikes by categorizing costs into various segments. The researcher intends to address this issue by implementing the Activity Based Costing method, enabling a clear understanding of the costs associated with activities conducted at the school for each unit every year.

2. LITERATURE REVIEW

Definition of Management Accounting

According to Hansen and Mowen (2013:9), Management Accounting is identifying, collecting, measuring, classifying, and reporting information that is useful for internal users in planning, controlling, and making decisions. So according to the definition above, it can be concluded that management accounting is the process of identifying, measuring and reporting financial economic information, to enable clear and firm assessments and decisions for management that use the information where the central point is for parties within the company organization. For example: Calculation of product costs, calculation of the cost of an activity, calculation of department costs.(Hansen et al., 2004)

School Financial Management Concept

School financial management includes planning, organizing, implementing, and controlling funds used to support school operational and development activities. According to several studies, an inefficient accounting system can lead to budget waste and suboptimal fund allocation (Mulyadi, 2017)

Classification of Education Costs

Regarding the type and level of education costs, Cohn and Geske (1990:71) group education costs as: 1. Direct costs, namely costs incurred by schools, students, and student families, and (2) Indirect costs such as forgone earnings. Other definitions of education costs include direct costs and indirect costs. In addition, Hallak (1999:25-27) groups cost based on, (1) type of education (public and private), in this case, expenditure is compared to the number of registrations, (2) level of education and majors (3) objectives, namely direct costs (recurring expenses for salaries and materials) and indirect costs (for general management) and can be used to encourage attendance at the side (intervention costs, explaining the difference between average costs between countries/levels of education), social costs and transfer costs (canteens, dormitories, transportation, and scholarships) and (4) nature of payroll expenditure (payroll). (Kurniati, 2024)

Activity-Based Costing (ABC)

Activity-Based Costing (ABC) is a costing method used in management accounting to identify, measure, and allocate costs more accurately to products or services based on the actual activities required to produce the product or service (Perdana, 2020). ABC is an important tool in understanding a company's cost structure in more detail and accurately. The theoretical basis of Activity-Based Costing (ABC) involves several key concepts (Bakti, 2022). First, ABC begins with identifying and understanding the activities involved in the production process or service delivery. These activities encompass all necessary operations such as raw material procurement, processing, inspection, warehousing, and others. Unlike traditional costing methods that allocate costs based on general metrics like labor hours or machine usage, ABC focuses on allocating costs based on the actual consumption of activities by each product or service.

This is achieved through identifying cost drivers factors that significantly influence the cost of an activity. For instance, the number of orders can be a cost driver for raw material procurement activities. By deeply analyzing these activities and their corresponding cost drivers, ABC enables organizations to obtain a more accurate cost structure, allowing for a clearer understanding of the true cost of producing each product or service. Consequently, this accuracy supports better decision-making regarding resource allocation, pricing, and strategic

planning, as managers can focus on the most profitable offerings. Moreover, ABC aids in cost control by highlighting activities that may not add substantial value and can thus be optimized or eliminated (Nur Mar'atus Sholikha et al., 2023).

Previous Studies on ABC Implementation in the Education Sector

Several studies have discussed the application of Activity-Based Costing (ABC) in the context of education. Supriyadi (2015) found that implementing ABC in several secondary schools improved the accuracy of fund allocation and helped reduce waste. Similarly, research by Rahman and Setiawan (2019) showed that the use of ABC enables schools to identify value-added activities while eliminating inefficient ones. Furthermore, a study by Amitha and Firmansyah (2021) revealed that ABC can enhance financial transparency in schools, which in turn increases the accountability of school management to stakeholders.

School Financial Management

School financial management is the process of planning, organizing, controlling, and evaluating financial resources to achieve educational goals effectively and efficiently (Rusdiana, 2022). Good school financial management must be based on the principles of accountability, transparency, effectiveness, and efficiency (Prihantini, 2021). According to Permendikbud No. 75 of 2016 concerning the School Committee, school financial management must include aspects of planning, budgeting, implementation, reporting and accountability. The main challenges in school financial management include proper allocation of funds, controlling operational costs, and optimizing funding sources (Permendikbud RI, 2016)

3. METHODS

This study falls under the category of qualitative research. Qualitative research is an approach often referred to as an investigative method, as researchers typically gather data through in-person meetings and direct interactions with individuals at the research site. Additionally, qualitative research can be defined as a type of study that does not rely on statistical methods or numerical calculations. Nevertheless, the data retrieved from qualitative research can still undergo analysis through quantitative techniques.

The data types utilized in this research are categorized as follows: subject data consists of information reflecting the opinions, attitudes, experiences, or characteristics of individuals or groups who are the focus of the study (Respondents). This type of data typically takes the form of results from interviews. Documentary Data encompasses research information such as journals, letters, minutes from meetings, or program reports. This type of data provides details about what happened, when it occurred, and who was involved in the incidents.

Data Analysis Methods

The analytical approach utilized in this research is a descriptive analysis technique, which outlines how tuition fees have been established in educational institutions to date using the Activity Based Costing method. The procedure for applying Activity-Based Costing (ABC) in this research includes several structured steps. It begins with recognizing the activities involved in the operational process, followed by categorizing costs based on these activities into different levels. After that, cost drivers elements that influence the cost of each activity are identified. The next step involves calculating the rate for each unit of the cost driver, using the formula: $\text{Cost Driver Unit Rate} = \text{Number of Activities} / \text{Cost Driver}$. Once the rates are established, overhead expenses are allocated to products by applying the cost driver rates in conjunction with activity metrics. The distribution of overhead costs for each activity is determined using the formula: $\text{BOP fee} = \text{Cost Driver Unit Rate} \times \text{Chosen Cost Driver}$. Finally, the calculation of SPP (Sumbangan Pembinaan Pendidikan) rates is explained by comparing the results obtained through the ABC method with those derived from the traditional cost method.

4. RESULTS AND DISCUSSION

Calculation of Tuition Fees Using the Traditional Cost Method

The basis for calculating the SPP rate is the salary of teachers and employees.

Here is how to calculate the SPP Rate for SMP Islam Parlaungan:

Tuition Fee/Month = $\frac{\text{Number of Teaching Hours and Position Hours} \times \text{HR Rate}}{\text{Number of Students}}$

$$= \frac{1.093 \times \text{Rp } 24.000,-}{398}$$

$$= \frac{\text{Rp } 26.232.000,-}{398}$$

$$= \text{Rp } 65.909,-$$

$$= \text{Rp } 65.000,-$$

Supporting Data for Activity Based Costing

The data needed to determine tuition fees using the Activity Based Costing method includes data on student tuition fee payment recapitulations, detailed data on teaching hours and office hours, and data on the number of students.

Discussion

Calculation of Tuition Rates with Activity-Based Costing Method

1. Identifying Activities

Resources that are directly consumed by an activity are charged to the activity concerned with direct tracing (if the activity has a cause-and-effect relationship). Resources that are not directly consumed by an activity are charged with an estimated allocation (if there is no cause-and-effect relationship).

The activities that influence the determination of Tuition Rates are the Activities of Providing Materials and Services. Included in this activity are the costs of HR for Teachers and Employees.

2. Classify costs based on activities into various levels of activity.

In this step, costs will be classified by level. The classifications include:

a. Unit-level activity

The cost of unit-level activity is proportional to the number of production units. Included in this activity are HR costs for Teachers and Employees. The calculation of Teacher Salaries is based on teaching hours, while for Employees it is based on working hours.

Table 1. Classification of costs based on activity level

Cost Components	Total Cost (Rp)
Unit level activity	
HR Teachers and Employees	314.784.000

Source: Secondary Data, processed

3. Identifying Cost Drivers

Cost drivers are cost triggers that are used as a reference for measuring the activities carried out. In the activities carried out by SMP Islam Parlaungan, the following are the Cost Drivers:

Table 2 Identification of Activities into Cost Drivers

No	Expenditure Post	Cost Driver		Total cost
		Unit	Number of Units	
1	HR Teachers and Employees	Direct Tracking	13.116 jam	Rp 314.784.000,-

Source: Secondary Data, processed

4. Determining the rate per unit of cost driver

After identifying the cost driver, the next step is to determine the rate per unit of the cost driver because each activity has a cost driver by dividing the total cost by the cost driver.

$$\text{Driver cost per unit rate} = \frac{\text{Number of Activities}}{\text{Cost Driver}}$$

The following is the determination of the rate per Cost Driver unit:

Tabel 3 . Determination of Tariff per Cost Driver Unit

No	Expenditure Post	Total cost (Rp)	Cost Driver	Rate/unit (Rp)
1	HR Teachers and Employees	314.784.000	13.116	24.000

Source: Secondary Data, processed

Charge costs to products using Cost Driver rates and activity measures.

In determining the SPP rate based on the Activity Based Costing method, it is as follows:

1. The cost driver is divided by 12

$$\text{The calculations} = \frac{13.116 \text{ hour}}{12}$$

$$= 1.093 \text{ hour}$$

2. After that, multiply the rate/unit

$$\text{The calculation} = 1.093 \text{ our} \times \text{Rp } 24.000,-$$

$$= \text{Rp } 26.232.000,-$$

3. The overall total is divided by the total number of students for the 2014/2015 school year.

$$\text{The calculation} = \frac{\text{Rp } 26.232.000,-}{398}$$

$$= \text{Rp } 65.909,54$$

$$= \text{Rp } 66.000 \text{ (Rounding)}$$

5. CONCLUSION AND SUGGESTIONS

Conclusion

Based on the results of research and discussion conducted by researchers at SMP Islam Parlaungan, the following conclusions can be drawn: SMP Islam Parlaungan has calculated the tuition fee rate based on the HR costs of Teachers and Employees and the calculation is based on teaching hours for teachers, while working hours for employees. In calculating the tuition fee rate, SMP Islam Parlaungan rounds down. According to the calculation method of SMP

Islam Parlaungan, the tuition fee rate is IDR 65,909, but the school management determines the tuition fee rate at IDR 65,000, on the grounds of cost efficiency. This causes an undercost in charging costs.

Suggestions

The management of SMP Islam Parlaungan should pay more attention to the rounding of tuition fees because it can cause inaccuracy in charging costs. Additionally, the school's management is encouraged to begin implementing the calculation of tuition fees using the Activity-Based Costing method by considering other internal and external factors. Furthermore, the management should also consider applying the Activity-Based Costing method in calculating re-registration fees, as it provides more accurate cost calculations compared to relying solely on estimations. This approach can help the school offer quality services and facilities while maintaining cost accuracy. For future researchers, it is advisable to further explore and develop the application of the Activity-Based Costing method to support more precise cost allocation across both commercial and non-commercial organizations.

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