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DETERMINATION OF SCHOOL PRICE THROUGH ACTIVITY-BASED COSTING APPROACH IN THE PRIVATE SECONDARY SCHOOLS IN SOKOTO STATE, NIGERIA

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Abstract
There are growing number of private educational institutions especially secondary schools as a result of increase in the demand for private education. Gaining competitive advantage by a private school is a crucial role being played by school managers, and it lies on making critical decisions including determination of annual school fees to charge parents. Setting up school prices is influenced by some factors including but not limited to parents who are the customers, existence of other school in the market, cost incurred in providing educational services, and so on. This study focusedon the implementation of activity-based costing approach to set school fees. The study analysed the financial information/data obtained from the schools used as a case study. The study compared the traditional costing approach and activity-based costing approach in terms of price setting based on the financial information analysed. The study found that implementation of activity-based approach was more profitable to the schools than using traditional approach. The study therefore, recommended the implementation of activity-based costing system to set the annual school fees.

Keywords: Secondary school, Pricing, Activity-based approach, Costing, Education Cost

Introduction

It is a common knowledge that education is a dependable tool used by any nation to attain development in all spheres of life. Rapid increase in population in Nigeria led to the liberalization of education system at all levels where private sectors came in to invest in the field of education by establishing private educational institutions. These private schools provide services required like public schools, but must also generate profits to remain in existence and to improve on the quality of the services they provide.

Various factors such as increase in population, poor conditions of public schools, improving affordability, and public perception that private schools provide better services than public schools and profits generation continue to fuel growth in the Nigerian education industry (Atolagbe, et al., 2019). One of the most important elements in human life is achieving the appropriate quality education at the right time and this growing need of sound education has increased the number of private schools and also shapes competitive educational industry (Uchendu, et al., 2015).

Private secondary schools are compelled to seek ways to provide high quality services with the lowest interest by the intense competition in the private educational sector (Coskun & Yilmaz, 2013). School managers are required to have a detailed and correct information about cost to better manage the cost with the goal of increasing resource investment in most efficient ways and to reduce the cost (Olaoye et al, 2018). Özyürek & Ulutürk (2015) argued that allocation of the cost to services provided by the school is very crucial in decision making process of the school managers. Important decisions such as resource allocation, investment decision, introducing new programme and pricing decision are all based on the cost of the services (Hurlburt, et al., 2014).

One of the core drivers of any business is the profit motive (Agbaeze, et al., 2020), and private schools in Nigeria, like other schools across the globe, are generally pursuing the profit motive for survival/maintenance, even if owned by a foundation. Achieving the strategic goals of the school and making a right decision require the use of favourable techniques in cost allocation (Coskun & Yilmaz, 2013).

This study presents how to determine the fees to charge students annually using activity-based approach through the

implementation of the activity-based costing system in a private secondary school in Sokoto, Nigeria.

Statement of the Problem

Education is a fundamental right, and private secondary schools often operate with a unique set of challenges and expenses (Coskun & Yilmaz, 2013). The existing literature highlights the importance of considering various activities contributing to the overall cost structure (Hashim, 2013; Naidoo, 2011; Coskun & Yilmaz, 2013). Private secondary schools play a crucial role in the education system, providing quality education with additional services. However, determining the appropriate pricing structure for these schools remains a complex task.

Despite the significance of private secondary schools, there is a lack of comprehensive research on how to effectively determine school prices, particularly in Sokoto State. Existing pricing models may not accurately reflect the diverse range of activities and associated costs involved in providing quality education (Coskun & Yilmaz, 2013). This study therefore, investigated the determination of school prices in private secondary schools in Sokoto State, Nigeria, utilizing an Activity-Based Costing (ABC) approach

Research Objectives

The study was carried out to achieve the following objectives:

1. To identify the various activities contributing to the overall cost structure in private secondary schools in Sokoto State, Nigeria.
2. To develop an Activity-Based Costing (ABC) approach for determining school fees in private secondary schools in Sokoto State, Nigeria.
3. To determine school fees using traditional costing approach in private secondary schools in Sokoto State, Nigeria.
4. To compare the effectiveness of implementing ABC and traditional approaches in determining school fees in private secondary in Sokoto State, Nigeria.

Research Questions

The following research questions were raised to guide the study:

1. What are the activities contributing to the overall cost structure in private secondary schools in Sokoto State, Nigeria?

2. How activity-based costing approach can be used to determine school fees in Private schools in Sokoto State, Nigeria?
3. How can School fees be determine using traditional costing approach?
4. What is the effectiveness of implementing ABC and traditional costing approaches in determining school fees in Private schools in Sokoto State, Nigeria?

Literature Review

Concept of Pricing Decision

Monroe (2014) asserted that pricing decision is a general decision that every single institution is bound to make, because this eventually affects their corporates objectives, either directly or indirectly. The prices charged by educational institutions vary from one institution to another, and thus remains a subject of several factors. Some of these include the demand for educational services, availability of service competitors, costs implications, political environment, legal and image-related issues to list a few (Olaoye et al, 2018). Pricing services provided by educational institutions is the process of determining the value of sales that the customers are willing to pay (Coskum &Yilma, 2013). It is the process whereby the school sets up school fees to be paid termly or annually which is affordable to the parents. Pricing decision in private schools is a strategic decision designed to build relationships with parents based on stable and predictable prices (Hashim, 2013).

Key Influences on Pricing Decision

Pricing a product or a service by manufacturing firms or service institutions ultimately depends on the demand and supply for that product/service (Agbaeze et al., 2020), and there are three main factors that influence demand and supply of education; parents, other private schools, and costs of education (Olaoye et al., 2018).

Parents

Parents influence price of schooling through their effect on the demand for educational services, based on factors such as the features of the service, its quality and the value placed on education and their ability and willingness to pay (Olaoye et al., 2018).

Other Private Schools

With the rapid increase in population, leading to high demand for education and the increasing quest by parents to prepare their children for a better life through quality education, no private school operates in a vacuum. Private schools must always be aware of the actions of their competitors. The availability of alternative or substitute services of other private schools hurt demand and forces a school to lower prices or improve the quality of their services to justify the price (Olaoye et al., 2018). Under normal circumstances, where there is no or very limited competition, a school is free to set higher prices (Hashim, 2013). When there are competitors, schools try to learn about competitors' technologies, plant capacities, and operating strategies to estimate competitors' costs—valuable information when setting prices (Coskum & Yilmaz, 2013).

Costs of Education

Costs of education influence school fees because they affect service provision (Naidoo, 2011). The lower the cost of providing a service, the greater the quantity of service the school is willing to render (Coskum & Yilmaz, 2013). Generally, as companies increase supply, the cost of producing an additional unit initially declines but eventually increases (Monroe, 2014)). Schools render services so long the revenue from selling additional units exceeds the cost of producing those services (Hurlburt et al., 2014). Therefore, school heads who understand the cost of producing educational services will prices that make the services attractive to parents while maximizing operating income.

Managers of private schools' weigh customers, participants, and costs differently when making pricing decisions (Olaoye et al., 2018). In a situation where private schools operate in a perfectly competitive market, they sell very similar services, and as such, they have no control over setting prices and must accept the price determined by a market consisting of many participants (Olaoye et al., 2018). On the other hand, if a school attained a competitive advantage, it can set up its price different from the competitor for providing unique services that justify the cost (Hashim, 2013). Cost information is only helpful in deciding the quantity of output to produce to maximize operating income (Olaoye et al, 2018). In less-competitive markets, all three factors affect prices (Coskun & Yilmaz, 2013). Özyürek and

Ulutürk (2015) argued that the value parents place on school services and the prices charged for competing services affect demand. They further assert that the costs of producing the services influence supply. As competition lessens even more, the key factor affecting pricing decisions is the parent's willingness to pay based on the value they place on the service, not costs or competitors (Özyürek & Ulutür, 2015).

Despite the competition in educational industry in Sokoto metropolis, the school under investigation is the only known private school owned by a charitable organization operating in three different official languages (Arabic, English and French). These and other services such as extra lessons and extension services make it different form other competitors and thus attract customers. Since the school targets middle income and less privileged members of the society, the school should set its prices affordable to the target population. The aim of this study therefore, is to determine if implementation of activity-based costing approach in setting school fees will yield better result (profit) than the traditional costing method in a private school owned by a charity organization. This is because, the most common and widely used approach of setting prices for both physical products by manufacturing firms and services by service institutions including private schools is traditional system of pricing (Coskun & Yilmaz, 2013; Monroe, 2014).

Activity Based Pricing Decision

Activity based pricing method uses the cost assigned to services by using the activity-based costing approach (Coskum & Yilmaz, 2013). This approach provides a relatively painless way to disaggregate functions into meaningful activities that drive costs (Hurlburt et al., 2014). Activity based pricing method establishes base pricing options for the school to provide parents for any special service they requested. It is a method of cost allocation that assigns indirect costs to services using the activities. Hashim (2013) argued that computation of unit cost of students in a school using activity-based costing is done with better accuracy than using traditional cost allocation approaches. To reliably calculate the cost in a school, the application of activity-based costing relies on processes, activities, services and customers for resource costing. The two phases of activity-based costing approach as outline in Coskum and Yilmaz (2013) are: accumulation of total cost of each

activity and computing the cost of activity cost pool and to deliver these accumulated costs to cost objects such as educational services through appropriate cost allocation based (Cooper & Kaplan, 1991).

In service-providing institutions such as school, cost allocation may be more difficult than in manufacturing institutions. Educational services are different from physical products, for this reason, private schools carefully define the cost objects and then allocate cost in a proper way (Coskum & Yilmaz, 2013).

Since the school of interest in this study offers a number of activities/services some of which are core to every student while some remain optional, the activity-based pricing decision would be the best approach to determine the school fees affordable to the target customers, yet generating profit to continue existing and remain competitive in the educational industry.

Benefits of Activity Based Costing System

Naidoo (2011) and Coskum and Yilmaz (2013) outline benefits to be obtained by converting from traditional costing systems to an ABC system as follows:

i. Better cost information.
ii. Better identification of resource needs.
iii. Better distribution of scarce resources.
iv. Better course and programme mix.
v. Better cost control.
vi. Better public relations tool.

Review of Empirical Studies on the Determination of Price Using Activity Based Costing Approach

To determine prices using an activity-based approach, several studies have been conducted in various fields. In private educational sector for example, Coskun and Yilmaz (2013) conducted a study on the determination of school fees in private high schools in Turkey. They first identified the activities that are cost drivers based on which the price was determined. They implemented both traditional and activity-based costing (ABC) approaches. They discovered while both approaches are relevant for pricing decision, ABC was found to be better for making a fair and justified pricing decision, and for maximizing profits. Also, Afolabi (2024) carried out a study on the applicability of activity-based

Costing system for pricing decisions in private secondary schools in Oyo State, Nigeria. He identified cost driving activities that guided the implementation of ABC approach of pricing. He discovered that ABC is a very effective and significant method of determining school fees in private schools.

Similarly, in health sector, Niñerola et al. (2021) wrote on the use of activity-based costing (ABC) and time-driven activity-based costing (TDABC) to improve healthcare performance. They discovered the relevance of these approaches in cost determination. Also, Alves et al. (2018) in their study, conducted a systematic review on economic analyses in cancer care using ABC and TDABC. Their findings demonstrated the applicability of these methods in assessing and managing costs in the healthcare sector.

In the business context, Setiawan and Reswanda (2018) carried out a study on the implementation of ABC to determine the production costs pricing decisions of micro, small and medium enterprises (MSMEs). They indicated the versatility of ABC in different economic sectors including price setting for maximum Profit. Similarly, Foroughi et al. (2017)'s study on the identification of the appropriate approaches pricing decisions advocated for the use of ABC to identify the true costs of processes and products, enabling companies to make informed decisions related to profitability and expenses.

Balakrishnan et al. (2011) discussed different product costing systems, including traditional volume-based systems, ABC systems, TDABC systems, and resource consumption accounting to examine their significance in pricing decision. They discovered that ABC is more relevant in price decision-making processes. Akhavan et al. (2016) compared TDABC with traditional approaches in cost estimation for price setting. They demonstrated that newer methods such as TDABC offered more precise estimates of true costs for pricing decisions, particularly in surgery and healthcare settings.

Therefore, these studies collectively supported the use of activity-based approaches, including ABC and TDABC, in various sectors such as education, healthcare, business, and production, highlighting their effectiveness in determining prices and costs accurately.

Methodology

The study employed a case study design, as only one private school was studied. The population for the study comprised number of students across the six classes/grade levels who registered and paid the fees for all or any of the chosen services offered by the studied school during 2021/2022 academic year, which was 448. The instrument for data collection was a checklist consisting of a number of activities offered by the school under study in relation to its service provision that incur cost.

Data Collection Procedure

The researchers requested the school authority to provide the list of activities that the school runs by presenting them with the list of possible activities to confirm and to add the missing activities from the presented list.

Also, the school authorities provided the researchers with the total cost accumulated in the terminal budget of the school in the third term of 2021/2022 session covering all expenses, which was 40,473,665 Nigerian naira.

Similarly, the list of cost allocation bases for the activity cost pool was given by the school authority. Coskun and Yilmaz (2013) argued that cost allocation bases are carefully selected based on cause-and-effect relationship in order to reflect the actual consumption of the resources used by the cost objects during the period.

Methods of Data analysis

With regards to research question one, the list of activities run by the school was presented in a table and interpreted. With regards to research two, cost allocation base for each activity cost pool was also presented in a table. However, with regards to the remaining research questions (3 and 4), the cost of activities are first allocated to cost objects. Here, the total cost of the activities are allocated using the cost allocation rates. The cost objects here are the different classes/grades considered in the study, which are JSS I, JSS II, JSSIII, SSI, SSII, and SSIII grades. To calculate the cost allocation rates, the researchers divided the total cost of each activity by the total quantity of the cost allocation based of the activity. For instance, cost allocation rate for activity 1 (new enrollment) is ₦17,500 per new enrolled SS 1. For each grade,

allocated cost of each activity is accumulated. Then, the unit cost of students is calculated by dividing the total cost of the classes to the total number of students in each class/grade.

Also, the traditional costing system was computed by adding a desired profit margin (in this case, 10% mark-up) to the total cost (annual/termly budget) and divided by the total number of students.
Further, the activity-based costing pricing approach was implemented by adding the unit cost of students and the desired mark-up (10% mark-up in this case).

Lastly, arithmetic difference between the traditional costing system and activity-based costing system when implemented in determining school fees was computed to find out which of the two offers more financial benefits to private schools.

Data Analysis and Results

Data was analysed in accordance with the research objectives as follows:

Research Questionn1: What are the activities contributing to the overall cost structure in private secondary schools in Sokoto State, Nigeria?

To identify the various activities contributing to the overall cost structure in private secondary education.

Table 1: Activities offered by the private schools under study

S/N	Name of Activity
Activity-1	Fresh students' enrolment
Activity -2	Returning students' enrolment
Activity -3	Staff training
Activity -4	Educational activities
Activity -5	Extra-curricular activities
Activity -6	Extra-lesson
Activity -7	Extension
Activity -8	Da'awah/Counselling
Activity -9	PTA meeting
Activity -10	Final year examination
Activity -11	Boarding services
Activity -12	Health services

To identify the activities the offers that drive cost in line with research objective one, respondents were presented with the list of activities and were asked to confirm any activity they do and to provide any other activity they offer that was not in list presented. Table 3 presents the list of activities offered by each private school under investigation. The table 1 shows that all the schools offer twelve primary activities that drive cost.

Research Question Two: How activity-based costing approach can be used to determine school fees in Private schools in Sokoto State, Nigeria?

To develop an Activity-Based Costing (ABC) approach for determining school fees in private secondary schools. This research objective is achieved through the following steps:

Step 1: Determine cost allocation bases for the activity cost pool

To determine the cost allocation base for each activity cost pool, researchers requested the school authority to provide the cost driver for each activity offered by the school.

Table 2: Cost allocation bases for the activity cost pool

Education Activity Centre	Cost Driver
1 - Fresh students' enrolment	Number or enrolled fresh students
2 - Returning students' enrolment	Number of enrolled returning students
3 - Staff training	Number of training programme conducted
4 - Educational activities	Total number of students
5 - Extra-curricular activities	Total number of students
6 - Extra-lesson	Number of extra-lesson participants
7 – Extension	Number of final year students
8 - Da'awah/Counselling	Number of counseling activities for each grade
9 - PTA meeting	Number of PTA meetings per year
10 - Final year examination	Number of final year students
11 - Boarding services	Number of boarding students
12 - Health services	Total number of students

Table 2 presents the cost allocation bases for the activity cost pool by indicating the cost driver for each activity.

Step 2: Allocation of costs of the activities to cost objects (Determination of cost of activities)

Cost allocation was determined using ABC for the school under study. Allocated cost of each activity is accumulated for each class. Then, the unit cost of students is calculated by dividing the total cost of the classes to the total number of students in each class/grade level.

Table 3: Cost determination using ABC

		JSS 1		JSS 2		JSS 3		SS1		SS2		SS3	
Activity Center	Cost Allocation Rates	Cost allocation key criteria x Rate	Activity cost	Cost allocation key criteria x Rate	Activity cost	Cost allocation key criteria x Rate	Activity cost	Cost allocation key criteria x Rate	Activity cost	Cost allocation key criteria x Rate	Activity cost	Cost allocation key criteria x Rate	Activity cost
1 – Fresh students' enrolment	79,000/JS and 87,000/SS,	79,000 x 78	6,162,000	79,000x20	1,580,000	79,000x15	1,185,000	87,000 x 35	3,045,000	87,000 x17	1,479,000	-	-
2 – Returning students' enrolment	74,000/JS and 85,000/SS	-	-	74,000x65	4,810,000	74,000x 78	5,772,000	-	-	85,000x 75	6,375,000	85,000 x 65	5,525,000
3 – Staff training (Workshop for staff)	67 student	67 x 78	₦ 5,335	67 x 85	₦5,695	67 x 93	₦6,231	67 x 35	₦2,345	67 x 92	₦6,164	67 x 65	₦4,355
9 – Final year examinard on	25,000	-	-	-	-	-	-	-	-	-	-	25,000 x 65	1,625,000
10 – PTA meeting	117 per student	117 x 78	₦9,746	117 x 85	₦9,970	117 x 93	₦10,416	117 x 35	₦3,970	117 x 92	₦10,304	117 x 65	₦7,760
11 Boarding Services	40,000/boardling student	40,000 x 8	₦320,000	40000 x 9	₦360,000	40,000 x 11	₦440,000	40,000 x 10	₦400,000	40,000 x 12	₦480,000	40,000 x 12	₦480,000
Total Cost		**₦6,496,072**		**₦6,765,215**		**₦7,768,647**		**₦3,451,265**		**₦8,350,468**		**₦7,641,635**	
Unit Cost Per Student (Total cost/no. of students in the class level		**₦ 83,283**		**₦ 79,632**		**₦ 83,534**		**₦ 98,608**		**₦ 90,766**		**₦ 117,564**	

Table 3 presents how cost of the activities offered is determined using ABC. In so doing, the cost of the activities are allocated to cost objects. Here, the total cost of the activities are allocated using the cost allocation rates. To calculate the cost allocation rates, we divided the total cost of each activity to the total quantity of the cost allocation based of the activity. For instance, cost allocation rate for activity 1 (new enrollment) is ₦ 79,000 N per new enrolled JSS I student, ₦ 87,000 N per new enrolled SS I student, etc. In this case, we used the six class/grade levels of secondary education (JSS 1, JSS 2, JSS 3, SS 1, SS2 and SS 3) as the cost objects in the allocation. JSS 1 – JSS 3 formed the lower half of secondary education cycle while, SS 1 – SS 3 formed the upper half of the cycle. Allocated cost of each activity is accumulated for each class. Then, the unit cost of students is calculated by dividing the total cost of the classes/grades to the total number of students in each class/grade level. The table indicates the cost per unit students of the six classes: ₦ 83,283 for JSS 1, ₦ 79,632 **for** JSS2, ₦ 83,534 for JSS 3, ₦ 98,608 for SS 1, ₦ 90,766 for SS 2 and ₦ 117,564 for SS 3.

However, it can be seen from table that only activities 1, 2, 3, 9, 10 and 11 in the determination of cost of the activities. This is because, activities 4, 5, 6, 7 and 8 were all cost in activity 1 or 2 as claimed by the authority of the school that provided the information. Similarly, charges for activity-12, representing extra lesson, was based on informal arrangement between interested parents and willing teachers of the school, as allowed by the school authority, with no financial implication attached to school.

Step 3: Using activity-based costing system to determine price (school fees)

Table 4: Determination of price (school fees) using ABC approach.

Pricing Approach Using ABC	**Cost Object**					
	JSS I	JSS II	JSSIII	SSI	SSII	SSII
unit cost per Student as per grade	₦83,283	₦ 79,632	₦ 83,534	₦ 98,608	₦ 90,766	₦ 117,564
10% of unit cost per student	₦ 8,328.3	₦ 7,963.2	₦ 8,353.4	₦ 9,860.8	₦ 9,076.6	₦ 11,756.4
unit cost per Student + its 10%	₦ 91,612	₦ 87,596	₦ 91,888	₦ 108,469	₦ 99,843	₦ 129,321

In order to determine the price (school fees), the researchers used the activity-based cost allocation information to determine price (school fees) using activity-based costing approach. The researchers assumed that the school under investigation targets a 10% markup on activity-based cost of a student. In this case, the total unit cost per Student as per class/grade was added to its 10% using corresponding cost allocation information in table 3. Thus, table 4 indicates that the annual fees for various classes/grades are ₦91,612 for JSS 1, ₦ 87,596 for JSS 2, ₦ 91888 for JSS3, ₦ 108,469 for SS 1, ₦ 99,843 for SS 2 and ₦ 129,321 for SS 3. The table shows that SS III students pay highest fees followed by SSII students and then SSI students. However, JSS II students pay the least amount, while JSS I and JSS III pay almost the same fees, with JSS III paying a little higher.

It can be established from table 4 that the implementation of activity-based costing in pricing educationally-related services indicates that the school fees of different classes/grades vary as the activity-based pricing approach is implemented. This is because, different grades enjoy different services or same services for different prices. This implies that the schools that use activity-based approach in setting school fees neither unnecessarily over charge their clients, which will likely increase the parents' perception of fair prices, no under charge their clients thereby managing their resources effectively.

Research Question three: How can School fees be determine using traditional costing approach?
To determine school fees using traditional costing approach

Table 5: School fees determination using traditional costing approach

Pricing Using Traditional Approach	**Cost Object**					
	JSS I	JSS II	JSS III	SS I	SS II	SS III
Unit cost = Total cost divided by number number of students (40,473,665/448)	₦90,343	₦90,343	₦90,343	₦90,343	₦90,343	₦90,343
Annual school fees = total cost plus 10% markup divided by total no. of students (44,521,031.5/448)	₦99,377	₦99,377	₦99,377	₦99,377	₦99,377	₦99,377

Table 5 indicates that, in the traditional costing system, the unit cost is calculated by dividing the total cost of the school by the total number of students regardless of the class/grade level of students. This therefore neglects the differences in resource consumption between classes/grade levels. In this case, the unit cost would be ₦90, 343 naira per student across the six classes as can be seen in the table.

To determine school fees using traditional costing approach, the researchers computed 10% of the total cost accumulated in the annual budget of the school in the 2021/2022 academic session, on the assumption that the school targets 10% markup. The total cost in the annual budget was ₦ 40,473,665 Naira and 10% of it is 4,047,366.5. Then, the researchers added together, the total cost in the annual budget and the target profit markup (₦40,473,665 + ₦4,047,366.5 = ₦ 44,521,031.5). The result was divided by the total number of students. That is, ₦44,521,031.5/448 = ₦99, 377. Therefore, the annual fees would be ₦99, 377 naira across the classes/grades, as shown in table 5. This implies that the students are paying the same amount irrespective of their grade level and differences in resource consumption.

Research Question four: What is the effectiveness of implementing ABC and traditional costing approaches in determining school fees in Private schools in Sokoto State, Nigeria?

To compare the effectiveness of implementing ABC and traditional approaches in determining school fees.

Table 6: Comparing ABC school fees and Traditional school fees

Fees determining approach	**Cost Object**						**Total**
Fee in ABC approach	₦91,612	₦87,596	₦91,888	₦ 108, 469	₦99,843	₦129,321	₦608,729
Fee in Traditional costing approach	₦ 99,377	₦ 99,377	₦ 99,377	₦ 99,377	₦ 99,377	₦ 99,377	₦596,262
Difference	-₦ 7,765	- ₦11,781	-₦489	₦ 9092	₦ 466	₦ 29,944	₦ 12,467

The difference between activity-based costing method and traditional costing method is computed by subtracting traditional cost from activity-based cost. The total column of table 6 indicates a positive difference between activity-based pricing method and traditional pricing system (608,729 - 596,262 = 12,467). This implies that implementing activity-based pricing method is of greater value than using traditional pricing system.

Discussion

With regards to research question one, the study found that there were twelve cost driving activities with financial implication to both the school and students/parents. These cost drivers formed the basis for implementing ABC approach to determine school fees. Previous researchers (Coskun and Yilmaz, 2013; Afolabi, 2024) also identified activities that contributed to the overall cost structure in private secondary schools in Sokoto State. However, the activities may differ on account of the differences in educational polices, cultural settings and educational needs of the society between Sokoto State (Northern Nigeria) and other parts of the country.

The study also implemented the ABC approach to determine school fees. The study found that the unit cost per student differed across the six classes/grades which led to the determination of different school

fees for different grades. This shows different resources are required to train different students' grade. This justifies that those students are charged according to the resources they consumed. The study showed that SS III students are charged higher while JSS II students pay the least charges. This implies that the school use more resources in training SS III students compared to resources used in training JSS II students. This therefore confirms the ABC approach is a very relevant method of determining price/school fees. This finding agrees with the findings of the previous researchers (Coskun and Yilmaz, 2013; Setiawan & Reswanda, 2018; Foroughi et al., 2017: Afolabi, 2024) who revealed the relevance of using ABC approach in pricing decisions for profitability and expenses.

The study also found the advantage attached to the use of traditional pricing approach to determine school fees, as it generated profit. However, it subjected some students/parents at more disadvantages for spending higher than what they are supposed to pay for. This is because, there are differences in resource consumption across the six classes/grades of students, with SSIII consuming more resources and JSS II consuming less. This means that when traditional approach was used to determine school fees, some students were under charged while some were overcharged.

In comparing the effectiveness of employing ABC and traditional approaches in determining price/school fees, the study discovered that implementing ABC pricing approach was more effective by generating more value (profit) than implementing traditional pricing approach. This finding supported the finding of similar studies that discovered higher relevance of using ABC approach of pricing than traditional pricing approach (Balakrishnan et al., 2011; Coskun & Yilmaz, 2013; Akhavan et al., 2016).

Conclusion and Recommendation

The study was titled activity-based costing approach to determine school fees in a private secondary school in Sokoto, Sokoto State, Nigeria. The study discovered that in terms of resource consumption, there are differences among the six class levels of students. Thus, different fees should be applied to different class level. Therefore, activity-based approach was helpful in calculating the profit of each student. Activity-based costing data also provide support in making

such decisions as resource allocations, investment decisions, expanding or reducing scope (Coskun & Yilmaz, 2013), as well as pricing decisions which are all based on cost of the services provided. By implementing the activity-based costing system, educational institutions can evaluate their cost more precisely. This study highlighted the benefits that can be gained by private educational institutions if they wish to compete in a competitive and vibrant market. The study therefore recommended the implementation of an ABC system of pricing for secondary schools.

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