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Activity based costing (ABC)
vs. traditional cost accounting system
among Top 500 corporations in the Philippines

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Abstract

Activity-Based Costing is a management accounting tool used to guide in the strategy formulations of the company. This paper investigates the current adoption of Activity Based Costing among Top 500 Corporations in the Philippines. A telephone survey was conducted to know the current costing method these companies are using. The result of the study indicates that only few companies have adopted Activity Based Costing in their current operation. This simple study also reveals that Activity-Based Costing System is not yet fully appreciated by most of the companies here in the Philippines. In spite of the inherent strengths in the ABC model, very few companies have opted to adopt it in their business operations.

The researcher, through the survey conducted was able to know some of the reasons for ABC's low adoption in the Philippines. Among the reasons were: (1) employees lack of basic knowledge of ABC techniques; (2) employee resistance; (3) organizational changes essential with the use of ABC. Some respondents trace the source of hindered adoption of ABC to technical as well as complexity of the steps involved since ABC requires detailed records of the costs associated with producing products and services as compared to traditional methods. According to some respondents, this detailed record keeping requires more effort from the accountants and time consuming. Others feel that various companies would adopt ABC more if the accountants themselves marketed it better.

The study serves as an eye opener regarding the extent of adoption of ABC system in the Philippines. There are still a lot of things that can be researched on regarding the implementation and effectiveness of activity based costing system as a management tool for companies in the Philippines.

Activity based costing (ABC) vs. traditional cost accounting system among Top 500 corporations in the Philippines

Marivic Valenzuela-Manalo

1. Introduction

Costing system plays an important role in the decision-making process in any company. For this reason, it is important to consider several factors before choosing or changing an entity's costing method.

In today's marketplace, companies prosper by implementing strategies that create a competitive advantage. In the Philippines, one cannot seem to keep up with the growing number of businesses and accounting methods that are emerging today.

Introduced in the 1990s, Activity-Based Costing (ABC) has spread from its manufacturing roots and is now widely deployed across a range of businesses, from banking to telecommunication and E-companies. Business firms use the technique to understand the cost bases of their operations. ABC measures not just in terms of direct costs, e.g., labor or machine hours, materials or other billable goods – as with traditional methods. The idea is that by matching costs more closely with the tasks and processes that trigger them, organization can manage costs more effectively. That is the reason why ABC also takes into account associated indirect costs, which includes among others, building customer relationships or providing support services.

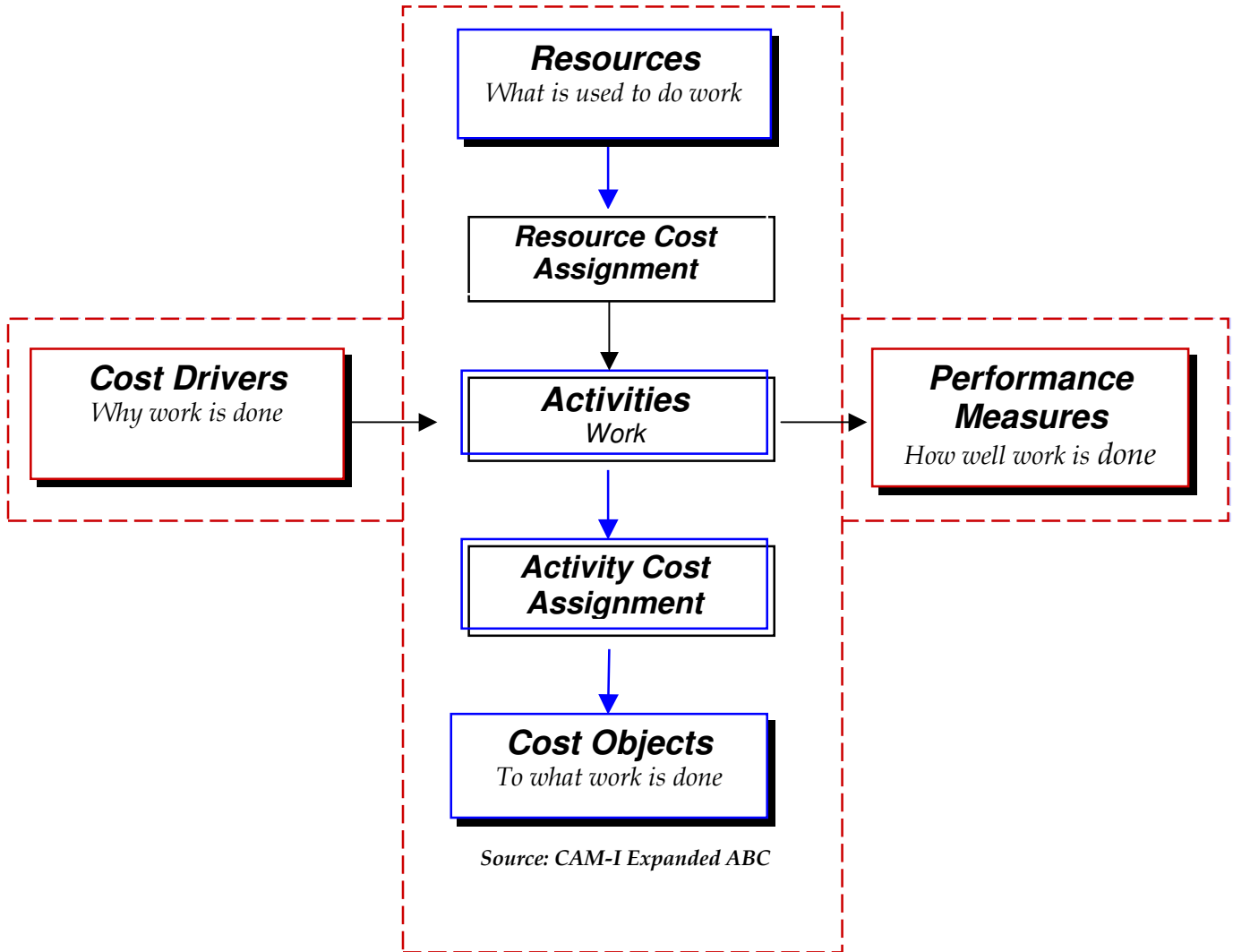
Activity based cost management framework has evolved since the time it was introduced by the Consortium for Advance Manufacturing-International (CAM-I) in 1991. CAM-I is a non-profit membership organization founded in 1972 that supports research and development in areas of strategic importance to industries. Since 1986, CAM-I's Cost Management System Program, a coalition of members from industry, government, consulting, software companies and the academe, has been recognized internationally as the leading forum for the advancement of cost management research and practice.

Figure 1 is the ABC framework developed by CAM-I. There are two axes to the ABC model. The vertical one deals with the cost assignment view. The resource entity contains all available means upon which the selected activity can draw. The resource cost assignment process contains the structure and tools to trace and allocate costs to the activity. The activity entity is where work is performed. The activity cost assignment process contains the structure and tools to assign costs to cost objects, utilizing activity drivers as the mechanism to accomplish this assignment.

The horizontal axis contains the process view. The cost driver is the agent that causes the activity to utilize resources to accomplish some designated work. In this view the activity is

some type of active work center. The horizontal axis of the ABC model represents the performance measure of activities provides the evaluative criteria by which the organization can determine the efficiency and effectiveness of the activities work effort.

Figure 1. ABC Model



The use of traditional cost accounting is now being considered by a number of companies as incomplete and unprocessed. Many users of the traditional methods say that the raw data reported does not reflect a clear view of the relationship between the cost and the cost object. Activity based costing was developed as a practical solution to these problems. ABC makes cost accounting comprehensible and rational. Users of cost information can relate much better to aid in making favorable impacts on decision-making. However, contrary to popular belief, ABC does not replace the established traditional costing that we have been adopted for so long now. ABC is really a translator and not a replacement in a sense that it translates the “chart of accounts” expenses into language that people can understand and also into elements of costs, which give more flexibility (Cokins, 2001). Traditional cost accounting is a sound device for collecting and accumulating costs but not for converting these costs into useful managerial information. ABC focuses on the work activities and not the transactions associated with the business operations. Thus, ABC links these activities into networks to cost out products or item which provides a superior costing accuracy, and to provide management a better basis for decision-making.

According to Kotler (2000), “ABC accounting tries to identify the real costs associated with serving different customers”. Both the variable costs and the overhead costs must be tagged back to each customer. Companies that fail to measure their costs correctly are not measuring their profit correctly and are likely to misallocate their marketing effort. Identifying the true costs arising in a customer relationship also enables a company to explain its true charges better to the customer.

In an ever-global competitive world of business, it is imperative that companies should discover and implement new techniques in order to be more productive, efficient and profitable. But like all other innovations, careful analysis must be taken before shifting to new methods and techniques. It is important that companies contemplating in effecting the much-needed change in their costing procedures make a thorough and careful analysis of both costing systems. The benefits in shifting from one technique over the other must be greater than the costs that would be incurred in the long run.

This paper attempts to answer the question what is the extent of adoption of Activity-Based Costing among the Top 500 Corporations in the Philippines? Specifically, this paper aims to know whether corporations included among top 500 companies in the Philippines (The Fookien Times Philippine Yearbook, 2001) have adopted Activity-Based Costing as their costing technique. Specifically, this study seeks:

1. To know an estimated percentage of companies among the Top 500 Corporations that shifted from traditional costing method to Activity-Based Costing technique;
2. To know the importance of shifting to Activity-Based Costing from the purely traditional costing techniques;

3. And to encourage further research on the implementation of Activity-Based Costing among companies in the Philippines that has finally adopted the system.

2. Review of Related Literature

A. Traditional Cost Accounting System Today

Historically, manufacturing and cost accounting became so linked because of the necessity to determine profit on goods produced, sold and shipped. Early decisions made within this relationship fostered a certain bench mark or standard upon which most of the manufacturers in the earlier times will use as method. In the past, using direct labor as basis for the computation of overhead costs to be charged on the products manufactured would make sense, since it has contributed to the largest percentage of the cost that was expended in manufacturing products such as, automobiles, trains, garments, etc. This procedure of allocating costs incurred in production, other than direct materials and direct labor costs was known as the traditional costing method.

Despite the fact that it is over 75 years old, most companies still use standard cost systems to value inventory for financial statement purposes and for many other management purposes as well. This standard cost system has some advantages for financial statement purposes (e.g., for simplicity and consistency). However, in this modern times where the way we do business have changed, insisting on the use of the traditional costing system would be misleading as a tool to assist in making effective management decisions.

The traditional costing system worked well until the business environment changed. About 20 years ago, most of the manufacturing firms began adopting changes in their operations, which were not consistent to traditional costing method. Automated equipment and robotics are just some of the many current discoveries that lessened the use of manpower, thus, minimizing direct labor costs. Under the traditional costing system, adhering on the use of direct labor as an allocation base for overhead or indirect costs distorts product cost computation.

The traditional cost accounting is becoming ineffective if not obsolete in the current global competitive world of business. The business scenario in the olden times for which it was developed and used is no longer the current business trend. Using standard cost, which is the one being advocated by traditional costing system was designed for a company that had: 1) homogeneous products, 2) large direct costs compared to indirect costs, 3) limited ability to collect data and 4) low “below the line” costs. On the other hand, today’s companies typically have 1) a wide variety and complexity of products and services, 2) high overhead costs compared to direct labor, 3) an overabundance of data and 4) substantial non product (e.g., distribution channels) costs that can dramatically affect true product cost.

Many manufacturing companies are still arbitrarily attaching overhead to products using direct labor as the basis. These companies often allocate the largest cost (i.e., overhead) based on the smallest cost (i.e., direct labor). Because of product variety and product line complexity, using one homogeneous overhead rate which is being utilized under traditional costing system, is no longer an appropriate average. Lastly, the modern business environment today, is now characterized by high technology, high-speed, state-of-the-art data collection and reporting systems. With the proper tools and equipment, gathering and manipulation of data in a multiple complex ways is no longer an issue. As a result of these changes, the traditional system, with its "one-size-fits-all" approach, is not an adequate tool for today's business conditions. Not only is the traditional costing method unable to supply the necessary framework for measuring cost accurately, it cannot also empower managers with sufficient information needed to manage the company's operations effectively and profitably.

B. Activity Based Costing Perspective

Far from being new, Activity-Based Costing (ABC) first surfaced as various commercial businesses began experiencing difficulties in accounting for indirect and overhead costs. Activity-Based Costing is a cost accounting method developed and pioneered by Roben Cooper, Robert Kaplan, and H. Thomas Johnson, which traces overhead costs directly to cost objects, i.e., products, processes, services or customers and help managers make the right decisions regarding product mix and competitive strategies (Roztocki, Valenzuela, Porter, Monk, Needy, 1999).

Cost management has become an integral component of organization's business and operational strategies. One of the popular techniques used in cost management is Activity-Based Costing. Its important advantage is it helps managers make decisions. It corrects the limitations of traditional costing by identifying all the work activities and their costs that enter into manufacturing a product, delivering a service, or performing a process. It differs from traditional costing because it traces cost directly when possible and all relevant manufacturing costs are considered.

Activity based costing is a refinement of the traditional costing systems of allocating manufacturing overhead to the units produced. As mentioned earlier, traditional costing systems always use volume-related measures, e.g., direct labor hours or machine hours to allocate overhead costs to products manufactured. On the other hand, ABC allocates overhead costs to products on the basis of the resources consumed by each activity involved in the design, production, and distribution of a particular product. This is accomplished by assigning costs to cost pools that represent specific activities and allocating these costs using appropriate cost drivers to the product. Cost drivers are those activities, which have a direct cause and effect relationship to the occurrence of a particular cost. (Carter, Usry, 2002)

ABC is an accounting technique that allows an organization to determine the actual cost associated with each product and service produced by the organization without regard to the organizational structure. An important function of ABC is to define the activities of a company as value adding or non-value adding activities. Value added activities are tasks undertaken by

the company for which the customers are usually willing to pay for the service. On the other hand, non-value added activities create waste, result in delay, add costs to the products, or for which cost customers are not willing to pay. ABC aids an organization in finding opportunities to streamline or reduce the costs, or eliminates the entire activity, especially if there is no value-added aspect to it.

ABC enables managers to see whether the resources are being used effectively and which activities contribute value to the product or service. The activities performed which need more resources for efficiency can be justified by analyzing these activities. A major advantage of using ABC is that it avoids or minimizes misrepresentations in product costing that result from random allocations of indirect costs. It matches the actual total cost of the resources consumed to the total output produced. ABC system could assist managers in identifying the value added activities which they could further improve to meet customers' demands and enhancing the product quality and process simplification and efficiency.

ABC has become extremely popular in recent years. In fact, it is difficult to find an academic or practitioner journal that does not include at least one article on activity-based costing, Activity-Based Management (ABM), or activity-based budgeting. A powerful tool for measuring performance, Activity-Based Costing is used to identify, describe, assign costs to, and report on agency operations. Companies that adapted ABC believe that it is a more accurate cost management system than traditional cost accounting. They say that ABC identifies opportunities to improve business process effectiveness and efficiency by determining the "true" cost of a product or a service.

3. Importance of Activity-Based Costing in the changing business environment

In any business operation, there are universal rules that must be remembered. The first of this is that, in the long run, a firm must be able to provide products and services at a price or cost lower than its competitors. Second, the inflation-adjusted cost of production and logistics must be in a continuous decreasing trend. This decrease can be attained hopefully through the learning curve theory. Third, the company should have a thorough -knowledge of each of their product cost and profit. Lastly, understanding and managing cash flow is as important as profit. Each of these aspects involve decision-making practices that have a profound impact on the organization. (Olsen, 1997). That is why it is very important that companies review their current costing systems in use to make sure that they are responding properly to the various changes brought about by competition and technological innovations.

Accountants have a big role to provide accurate numbers for businesses for them to make good and sound decisions. One of the most challenging tasks of accountants is to justify why ABC is important now when it was not important in the past. They need to challenge top management in reviewing the traditional cost accounting techniques, which many firms have been using for decades now. The way business was done in the past is very much different from the way business is currently conducted. That is maybe why business firms ought to start re-thinking on how they should operate their businesses.

The two basic reasons why companies should start reviewing their costing techniques should be considered. First, with the advent of modern technologies, many contemporary organizations now are changing their cost structure. For example of such change in cost structure is that from a labor intensive workforce in the past, most companies now are automating their business operations, thus, decreasing labor but increasing overhead costs. The second reason is the increasing diversity of products or services that companies are offering to its customers.

Analyzing the two basic reasons, why must ABC be given a second look by companies experiencing these changes in the business milieu? In a company that decided to change its business cost structure from traditional labor intensive manufacturing to capital-intensive manufacturing to become competitive, inaccuracies created by improper assignment of indirect overhead costs, e.g., machine depreciation, could have a dramatic impact on individual product costs that can lead to disastrous pricing, product profitability, and customer profitability management decisions (Hardy, J., Hubbard, E. in Latshaw, C., Cortese-Danile, T., 2002).

The second reason revolves on product or service diversification. Business organizations in the olden times can survive even if it offers just one type of commodity or products that are similar in nature. But in a business era of diversification and globalization, business firms should live up to the challenge of the modern times to keep abreast with competition. Many companies now are diversifying their product and service offerings to remain competitive. In this case, the indirect overhead costs including selling and administrative costs consumed by different products is no longer necessarily to be relatively equal as compared to producing only one type of product. Therefore, volume-based application of overhead costs used in the traditional costing system, e.g., units produced, would now create a very great distortion of product costs.

It is therefore important for companies to analyze their current operations to see if changes in the costing techniques should be adapted. ABC is only a tool that can be utilized if the company's operations require costing modifications. Activity-based costing will still use the data that traditional costing system generates. But the innovation here lies in the application of actual costs incurred to its cost objects. This means that indirect cost can be properly allocated under the Activity-based costing unlike in the traditional costing system where one or two fixed predetermined overhead rates are used to allocate all indirect costs incurred to the products manufactured.

4. Activity-Based Costing in the Philippines

The proponent conducted a telephone survey on the Top 500 Corporations (The Fookien Times Philippine Yearbook, 2001) in the Philippines and inquired about the costing system they are employing in their business operations. The result of the telephone survey conducted revealed that out of the Top 500 corporations in the Philippines, only 16 percent (i.e., 83 companies) are adopting ABC as their costing technique, 55 percent or 275 companies out of the 500 corporations surveyed are still using traditional cost accounting techniques. And 28.4 percent

(i.e., 142 firms) of the companies included in the survey cannot be contacted in any way possible. Of these 142 firms, 86 companies are not so cooperative and 55 companies do not want to reply to any telephone inquiries regarding their companies cost accounting system being currently used. Included in the 28.4 percent is one company that attempted to adopt ABC as their costing technique but eventually discarded it when they were overwhelmed by the magnitude of the tasks involved in the start-up of the system. The table below describes the respondents in the telephone survey.

Table 1: Summary of ABC Respondents' Telephone Survey

Analysis of the Respondents	Quantity	Percentile
ABC Users	83	16.6%
Non-ABC Users	275	55.0%
Total Usable Responses	358	71.6%
Not Cooperative Respondents	86	17.2%
Others (ABC User but abandoned it)	1	0.2%
No Response	55	11.0%
Total Sample Size	500	100%

This simple study reveals that Activity-Based Costing System is indeed not yet fully appreciated by most of the companies here in the Philippines. In spite of the inherent strengths in the ABC model, very few companies have opted to adopt it in their business operations. After more than two decades of its existence, the accounting profession in the Philippines seems to have overlooked ABC. The proponent was amazed on the lack of knowledge of many employees of different companies surveyed regarding activity based costing techniques.

The researcher, through this simple survey was able to know some of the reasons for ABC's low adoption here in the Philippines. Among the reasons that can be cited for low adoptions were: (1) employees lack of basic knowledge of ABC techniques; (2) employee resistance; (3) organizational changes essential with the use of ABC. Some respondents trace the source of hindered adoption of ABC to technical as well as complexity of the steps involved since ABC requires detailed records of the costs associated with producing products and services as compared to traditional methods. According to some respondents, this detailed record keeping requires more effort from the accountants and time consuming. Others feel that ABC would be adopted more by various companies if it were marketed better by the accountants themselves.

Companies in the Philippines that initially adopted ABC and eventually discarded it and those many companies that refuses to adopt the said techniques only saw that the cost of implementing it. But the real issue here in the proper implementation. Achieving architectural and software elegance, however, is not sufficient for the general or long-term success of an ABC system. Since ABC is embedded in a behavioral and organizational context that defines the programs and innovations that are implemented, it is important that an ABC implementation strategy be focused on these behavioral and organizational variables (Shields, 1995).

5. Conclusion

In the last decade, many firms have attempted to implement ABC system, not only here in the Philippines but also in other countries. There is a growing evidence, however, that many of these firms are experiencing problems with implementing ABC and, in the extreme, are not having success with it (Shields, 1995).

Most of the companies adopting ABC treated it as a technical innovation and not the administrative innovation that it is. It is important to note that in the adoption of ABC system, technical design issues are of value so as to ensure that appropriate cost information may be provided to support decisions and actions. But dealing with human issues vis-à-vis with the technical aspect is also of top importance (Shields, 1995).

Organizational changes essential with the use of ABC is a hindrance in implementing it. It is not easy to change from one method to another. It would take time to get used to and to realize its benefits. Not all businesses are flexible and can easily adapt with its changing environment. Complexity to implement ABC is another obstacle. It has a lot of reporting requirements and requires detailed records. Companies must understand that the information generated by ABC is what makes it special and unique. Another reason why many companies do not adapt ABC fully is because it is impractical to use the said system in the kind of business they have. It is important to note that ABC system is not appropriate for all companies and business operations. ABC can be a very useful decision making tool but companies must know that the decision to adapt Activity-Based Costing depends on the type of products they manufacture, and not on the size of the company. ABC is suitable to companies that run low volumes or have a wide difference in the complexity of their product or service offerings.

Constantly adhering to the costing technique the firm learned to master over time will not ensure profitability and costing efficiency. Welcoming new ideas and techniques does not mean that companies should actually adapt and implement them in their business operations. Thorough analysis of its costs and benefits should be made before shifting to another method. What is important is that, companies should be constantly aware of recent developments, new techniques and innovations so as to gauge whether these developments once adapted by the company will provide greater benefits than the costs incurred in putting such technique in place.

The choice of a system for calculating costs can have an important strategic implication. Using the wrong product costing system can lead to business failure. Therefore, it is imperative that companies should study and know whether ABC may be applicable to the current set up of their business organization rather than continuously using standard costing system that they have been using in the past. Once the appropriate costing system that best suit the business operation was determined, e.g. ABC, it is important that accountants must understand the basics of the new system that will be installed. The use of Activity-Based Costing technique will require a thorough understanding of the people implementing and

using it. Without the necessary training and expertise, like all other techniques, its application will prove to fail.

6. Areas for Further Research

This study serves as an eye opener regarding the extent of adoption of ABC system in the Philippines. Much can be studied in this particular field. Further research may be conducted regarding the implementation of ABC techniques among those firms that adopted it. A thorough study on the advantages and disadvantages on the use of ABC may be included to provide companies who may want to adopt the said techniques in their future operations a more sound basis for their decision to shift to this new costing method. A study may also be conducted as to the effect of using ABC in the profitability, solvency and liquidity of the company.

There are still a lot of things that can be researched on regarding the implementation and effectiveness of activity based costing system as a management tool for companies here in the Philippines. This is just the beginning.

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