ISSN 2277- 5846

THE INTERNATIONAL JOURNAL OF MANAGEMENT

Activity Based Costing vs Volume Based Costing : Relevance and Applicability

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Abstract:
Changes in global business competitive environment and technological innovation, accurate cost information is crucial for all the kinds of businesses, such as manufacturing, trading, and service sectors. The new environment demands relevant information and data about costs and performance within the organization's activities, processes, products, services and customers. The purpose of this article after investigating the existing literature in the field of research is to emphasize that new cost system such as Activity Based Costing could be a strong that assures competitiveness and efficiency for Manufacturing, Service Sector and even Government organization. ABC can radically change how managers determine the mix of their product line, price their products, identify the location for sourcing components, and assess new technology. Successful organizations are able to improve quality, lower costs and efficiency of operations and eliminate products and services that incur losses. Inaccurate costs of the production industry for finding that it has a difficult time determining which of its products is most profitable and the company keeps losing competitive bids for products and services. Thus, this study analyses how an ABC costing system that improves operations and to develop and to execute its strategy by providing accurate information about the cost of its products and services, the cost of serving its customers, the cost of dealing with its suppliers, and the cost of supporting business processes within the company– effective manner.

Keywords: *Activity Based Costing, Traditional Costing Systems, Managerial Decision Making, Cost Measurement, Conventional Costing System*

1. Introduction

Secondary sector is the lifeline for the economic growth of a country. It is today the largest and fastest growing sector globally contributing more to the global output and employing more people than any other sector. For most countries around the world, manufacturing is the largest part of their economy. The real reason for the growth of the secondary sector is due to the increase in urbanization, privatization and more demand for intermediate and final consumer services. Availability of quality services is vital for the well-being of the economy. In advanced economies, the growth in the secondary sectors as well as tertiary sectors is directly dependent on the growth of services like banking, insurance, trade, commerce, entertainment, social and personal. Efficiency of that sector based on the demand relevant information and costs within the organization's activities, processes, products, services and customers. Beware of little expenses. A small leak will sink a great ship.

Benjamin Franklin

The present paper chapter has a lot to do with implementing the spirit of Benjamin Franklin's observation in cost management terms that it really does matter how accurately you calculate a cost. Why? Having accurate costs is important for a variety of reasons: a company might find that it has a difficult time determining which of its products is most profitable. Alternatively, it finds its sales increasing, but profits declining and cannot understand why. Perhaps the company keeps losing competitive bids for products and services and does not understand why. In many cases, accurate cost information is the answer to these questions and it provides a competitive advantage. It helps a company or organization to develop and to execute its strategy by providing accurate information about the cost of its products and services, serving its customers, dealing with its suppliers, and supporting

business processes within the company.

The concept of activity-based costing (ABC) was introduced in the US, initially in the manufacturing sector during 1970s and 1980s. Robert Cooper and Robert Kaplan brought the ABC concept to light and published the body of knowledge in the Harvard Business Review in 1988. Cooper and Kaplan defined ABC method as an approach to solve the problems of traditional cost management systems; that is, the conventional cost accounting systems are often unable to identify correctly the true costs of processes. Consequently, management and quality professionals are unable to make sound decisions or make decisions based on the misrepresented data.

On the other hand, the ABC objectively assigns costs based on the cost-and-effect relationships. In 1987, Robert Kaplan and W. Burns published in their book Accounting and Management: Field Study Perspective, the ABC body of knowledge with the initial focus on manufacturing where technology and productivity improvement have reduced the direct costs and increased indirect and overhead expenses (Narong, 2009).[1]Activity-based costing was later explained in 1999 by Peter F. Drucker in the book Management Challenges of the 21st Century. He states that traditional cost accounting focuses on what it costs to do something, to cut a screw thread; activity-based costing also records the cost of not doing, such as the cost of waiting for a needed part.

Activity-based costing (ABC) is a costing methodology that identifies activities in an organization and assigns the cost of each activity with resources to all products and services according to the actual consumption by each. This model assigns more indirect costs(overhead) into direct costs compared to conventional costing. A company can soundly estimate the cost elements of entire products, activities and services with the help of ABC. That may help inform a company's decision to either: Identify and eliminate those products and services that are unprofitable and lower the prices of those that are overpriced or identify and eliminate production or service processes that are ineffective and allocate processing concepts that lead to the very same product at a better yield.

In a business organization, the ABC methodology assigns an organization's resource cost through activities to the products and services provided to its customers. ABC is generally used as a tool for understanding product and customer cost and profitability based on the production or performing processes. As such, ABC has predominantly been used to support strategic decisions such as pricing, outsourcing, identification and measurement of process improvement initiatives.

2. Literature Review

The present study mainly focused on Activity Based Costing, which could be a strong that assures competitiveness and efficiency for Manufacturing, Service Sector and even Government organization. Traditional cost accounting, which mainly uses one single cost driver such as direct labour or output volume to allocate the overhead costs, systematically distorts product costs in modern manufacturing and service environments in which overhear costs are a significant portion of product costs. Incorrect product cost information can lead to poor decisions (Wang, Du, Lei and Lin, 2010).[2]

The ABC system provides more accurate cost management and enables the university managers to calculate the 'true' cost of a product i.e. cost per students. It is crucial for effective implementation of the system that the ABC project team must be released from normal duties and the university must prepare to invest in computer technology. Therefore, special monitoring personnel are employed to administer the database. In addition to this input, processing and output controls are established in order to control changes and access.

In a nutshell, the ABC system clearly indicates that it can help the university to understand where the costs are, what drive them to occur, and which costs may be low value- added to the cost object. The system enables the department heads of the university to analyze and see things, through the lens of costs and work activities. This definitely will replace their decision-making behavior through intuition and assertions to fact-based. Therefore, the big opportunities of ABC system predicting planning cost estimation and elimination of non-added value activities, which are useful for operational strategic decision.[3]

ABC begins (Hughes &Gjerde, 2003) with the companies' products, determines the activities used in the production and delivery of those products, and computes the costs of various activities. The costs of the activities used in the production of a product are then assigned to that product in a manner that approximates a causal relationship. As a result, advocates insist that ABC systems provide more useful information for cost management purposes than traditional systems do. These differences are significant for companies with large amounts of overhead, multiple products, and high product diversity.[4]

Needy et al (2003) suggests that the implementation process of an ABC system should rely on the following four steps: (1) cost system evaluation; (2) ABC design; (3) ABC implementation; and (4) system evaluation and validation. Moreover, the ABC process should not be a "one-off" event; it demands a fundamental mind shift by the management, it should be a process of "relentless and continuous improvement" (Hughes, 2005).[5]

Traditional cost-based measures were developed decade ago, when direct labour costs were valuable and accounted for a major portion of production cost. Standards were developed for tracking and controlling direct labour activity, and indirect costs were allocated across product units. Those measures were appropriate for organizations that mass produced a narrow range of products and incurred mostly variable costs. However, labour now is largely fixed and indirect costs have been a large part of the total cost in most organizations. These indirect costs are incurred to acquire resources needed to provide a wide variety of activities, each with different cost drivers. Many of these indirect costs are also committed costs used to acquire the capacity to perform these activities. Though management can influence the level of spending for these committed costs in the long run, the amount of capacity acquired and related spending is fixed in the short run. This can lead to either over capacity and overspending or limited capacity and bottlenecks.More robust systems that provide detailed, accurate information about the behavior of these costs, and that assist companies in managing these committed resources are needed. Traditional accounting has a tendency to provide

information which, though accurate is often late, irrelevant, and misleading. It is also complex to the uninitiated with its double entries, accruals and provisions (Gering, 1999).[6]

An alternative managerial philosophy and its associated measurement systems, namely, activity-based costing(ABC), has been offered to overcome some of the failures of standard costing for improving managerial decision- making. ABC has been acknowledged to provide cost information for more precise cost allocation (Sheu, ChenandKovar, 2003).[7]

Consequently, cost and management accounting concepts and techniques are not only used in manufacturing sectors but also in service sectors to provide cost information for decision-making. A study by Horngren (1995)[8] found that the focus of cost management should be on decisions and the various cost management techniques, systems and measurements that spur and help managers to make wiser economic decisions. Of the many available cost management systems, research reveals that a bigger number of companies' uses Activity- based costing (ABC) method in comparison with the traditional costing system in providing timely and quality cost information (Adams, 1996; Brignall, 1997; Cagwin&Bouwman, 2002; Innes & Mitchell, 1997)[9].

However, the implementation of such system is costly and often the idea of implementing the system is drop as a result of time consumption and lack of expertise. In some cases, the cost for carrying out the ABC analysis is higher than the returns. Nevertheless, thereis a growing body of literature, which argues that, compared to the traditional costing systems, Activity- Based costing (ABC) offers important advantages to organizations (Adams, 1996).[10]

An overhead allocation based on activity centers avoids a common consequence of traditional output-based costing system particularly under cost low volume products. Astudy conducted by Innes and Mictchell (1997)[11] found that overheads based on activitycenters facilitate the targeting of unnecessary, wasteful, resource usage and the costly effects of over-complex ways of running a business process. This technique, which is popularly known as Activity-Based costing (ABC), is a 'system that focuses attention on the costs of various activities required to produce a product or service' (Baird et al., 2004: 384).[12]This system is in favor of many organizations in order to provide "true" cost information for their strategic decision-making.

ABC menu analysis: Menu prices in a restaurant are typically based on cost of goods sold, which ignores many major operating costs, such as labour and other operating expenses. ABC offers a more accurate method of costing by allocating more costs including facility sustaining costs (i.e. rent) to menu items. The analysis of menu items also included an assessment of their individual popularity. In a management report on menus, ABC data should be used in conjunction with other data before decisions are made on pricing or product expansion / removal.[13]

Time-based ABC in the hotel industry: In a recent application of time-based ABC in a hotel, the first step was to categorize the different customer segments such as international business customers, walk-in customers and so on. Each group was grouped according to their share of sales mix and their tendency to make different demands on the time of the various activity groups in the hotel. Although the rate per minute is the same for each customer category, the length of time spent by 'front office' activities depended on the type customer coming to the hotel. For instance, customers who required checking in and out obviously (on average) took more time than customers who are using the bar or attending functions such as weddings.[14]

Worker participation and leadership in time – driven ABC: Technical treatments of ABC sometimes neglect the human factor in the design and implementation of an ABC system. In a logistics company in Belgium, it was found that collective worker participation and leadership style influenced the achievement of operational improvements. A costing model that came out of a 'people-oriented' leadership style and worker participation resulted in more improvements that when managers did not engage with workers.[15]

Trafalgar Bank, a large UK-based multinational, before ABC, had some basic cost controls based on cost centre budgets with the full allocation of overheads, and measures of performance that included sale volumes and maintaining costs at budgeted levels. ABC is well suited to the financial service sector as many service costs are process rather than volume-related. ABC can be used to analyse the profitability of customers and the new financial products. ABC may also have further applications in areas like budgeting, forecasting and performance measurement in overhead departments. The ABC system used data gathered by detailed observation and interviews that, in the first year at least, were carried out by the ABC team themselves in each of the cost centres. Flow charts were constructed to illustrate visually the processes of each area of the clearing process. Headcount driver analyses were carried out and an activity analysis schedule was created of each section describing activities, details of the cost drivers and the allocation base. Although some the simpler cost- cutting exercises could have been achieved using other process improvement technologies, the ABC information provided a new costing sophistication and opportunities for cost management.[16]

In 1923, J. Maurice Clark coined the phrase 'different costs for different purposes', but most companies only have one costing system, which is used for all purposes: stock valuation, planning, control and decision-making (Brignall, 1997)[17].

Prior to the introduction of ABC costing system, a number of companies, particularly manufacturing sectors, used a traditional costing system called volume- based costing system, which is volume-based cost driver such as direct-labour hours, direct labour cost, or machine hours. At most the cost are classified into two main parts that are product cost which is a cost assigned to goods that were either purchased or manufactured for resale and period cost where administration and selling are recognized as expenses during the period in which they are incurred. If inventories are manufactured, the product cost is relatively easy to trace to production job but manufacturing overhead is not easily traced to jobs as these costs often bear no direct relationship with individual jobs or units of product (Hilton, 2005)[18].

The conventional or traditional accounting system allocates the manufacturing overhead to the products either plant wide overhead rate or on two-stage allocation system. The former allocates cost on a single activity base for the entire factory but the latter assigns manufacturing overhead cost based on departmental activities. Under this system, at the first stage, the manufacturing cost is collected into cost pools and then attached to products by a method based on unit volume of production such as direct labour hours (Brignall, 1997) Thus, the allocation of manufacturing cost depends on the types of resources that the

products consume. The greater the products consume the resource, the higher the overhead attached to the products based on one particular activity base such as direct labour hour, machine hour or direct labour cost. Furthermore, this system allows for cost distortions, which will be greater in business units with a higher proportion of overhead costs (Baird, Harrison, & Reeve, 2004)[19].

3. Objectives

The specific objectives of the study are:

1. To examine the evaluation of performance and helps to establish standard of performance for costcomparison purpose.
2. To evaluate the concept of management by objective, in which managers agree on a set of goals.
3. To study the effective use of the concept of management by exception this means that the managers' attention is concentrated on the important deviations.

4. Methodology

This paper relies on the literature review of past and current relevant articles focusing on activity-based costing(ABC). Source papers included refereed research studies, empirical reports and articles from professional journals. Except where a source was needed specifically for its perspective on broad issues relating to firms' overall business environment, the author screened papers by "activity-based costing" and by numerous variants of keywords, focusing specifically on activity-based costing in the service sector. Since the literature relating to ABC is voluminous, the author used several decision rules in choosing articles.

5. Activity Based Costing

To develop a costing system, need to understand the relationships among resources, activities, and products or services. Resources are spent on activities and products or services are a result of activities. Many of the resources used in an operation can be traced to individual products or services and identified as direct materials or direct labour costs. Most overhead costs relate only indirectly to final products or services. Nevertheless, overhead costs are resources spent on a firm's activities to manufacture products, provide services, or facilitate manufacturing. A good costing system identifies costs with activities that consume resources and assign resource costs to cost objects such as products, services, or intermediate cost pools based on activities performed for the cost objects.

Activity Based Costing is a costing approach that assigns resource costs to cost objects such as products, services, or customers based on activities performed for the cost objects. This approach of costing is that a firm's products or services are the results of activities and activities use resources which incur costs. Costs of resources are assigned to activities based on the activities that use or consume resources, and costs of activities are assigned to cost objects based on activities performed for the cost objects. ABC recognizes the causal or direct relationships between resource costs, cost drivers, activities, and cost objects in assigning costs to activities and then to cost objects.

6. Strategic Role of Activity Based Costing

In a manufacturing concern, the product lines have direct materials and labour costs that are traced directly to each of a certain product or products. In addition to that, there are indirect manufacturing costs that cannot be traced to each product from the following activities: materials acquisition, materials storage and handling, product inspection, manufacturing supervision, job scheduling and equipment maintenance. But if, as is usually the case, the usage of these activities is not proportional to the number of units produced, then some managers will be overcharged and others undercharged under the volume-based approach. Another consideration is that the volume-based method provides little incentive for the manager to control indirect costs. On reflection, the approach that charges indirect costs to product based on units produced does not provide very accurate product cost for manufacturing concern. The solution is to use activity-based costing to charge these indirect costs to the products,using detailed information on the activities that make up the indirect costs.

Robin Cooper and Robert S. Kaplan, proponents of the Balanced Scorecard, brought notice to these concepts in a number of articles published in Harvard Business Review beginning in 1988. Cooper and Kaplan described ABC as an approach to solve the problems of traditional cost management systems. These traditional costing systems are often unable to determine accurately the actual costs of production and of the costs of related services. Consequently, managers were making decisions based on inaccurate data, especially where there are multiple products.

Instead of using broad, arbitrary percentages to allocate costs, ABC seeks to identify cause and affect relationships to objectively assign costs. Once cost of the activities has been identified, the cost of each activity is attributed to each product to the extent that the product uses the activity. In this way ABC often identifies areas of high overhead per unit and so directs attention to finding ways to reduce the costs or to charge more for costly products. Like manufacturing industries, financial institutions have diverse products and customers, which can cause cross-product, cross-customer subsidies. Since personnel expenses represent the largest single component of non-interest expense in financial institutions, these costs must also be attributed more accurately to products and customers. Activity-based costing, even though originally developed for manufacturing, may even be a more useful tool for doing this.

7. Two Stage Cost Assignment Procedure

Factory overhead costs to activity cost pools and then to cost objects to determine the amount of resource costs for each of the cost objects. Volume-based costing systems assign factory overhead costs first to plant or departmental cost pools and second to products or services. This approach is convenient and simple, because many accounting systems in use today accumulate cost

information by department, which is easily aggregated to the plant level. In the second stage, a volume-based rate (based on units produced or hours used in production) is then used to apply overhead to each of the cost objects. A volume-based two-stage cost assignment procedure, however, is likely to distort product or service costs.This is true especially in the second stage where the volume-based costing system uses a cost driver such as direct labour hours or output units to assign factory overhead costs. Because all products or services do not always consume factory overhead resources in a cost pool in proportion to the volume-based measure or measures the firm uses to assign factory overhead costs, a volume-based system often leads to inaccurate measures for the costs of support activities in its operations. This distortion becomes more serious, especially when a substantial portion of factory overhead costs is not output-volume related and the firm manufactures a diverse mix of products with differences in volumes, sizes, or complexities.

Activity-based costing systems differ from volume-based costing systems by tracing uses of resources to activities and linking activity costs of products, services, or customers. The first stage assigns factory overhead costs to activities or activity cost centers by using appropriate resource consumption cost drivers. The second stage assigns the costs of activities or activity cost pools to cost objects using appropriate activity consumption cost drivers that measure the demands cost objects place on the activities. By using cost drivers in both the first and second stage cost assignments, activity-based costing systems provide more accurate measures of product or service costs for the cost of activities that are not proportional to the volume of outputs produced.

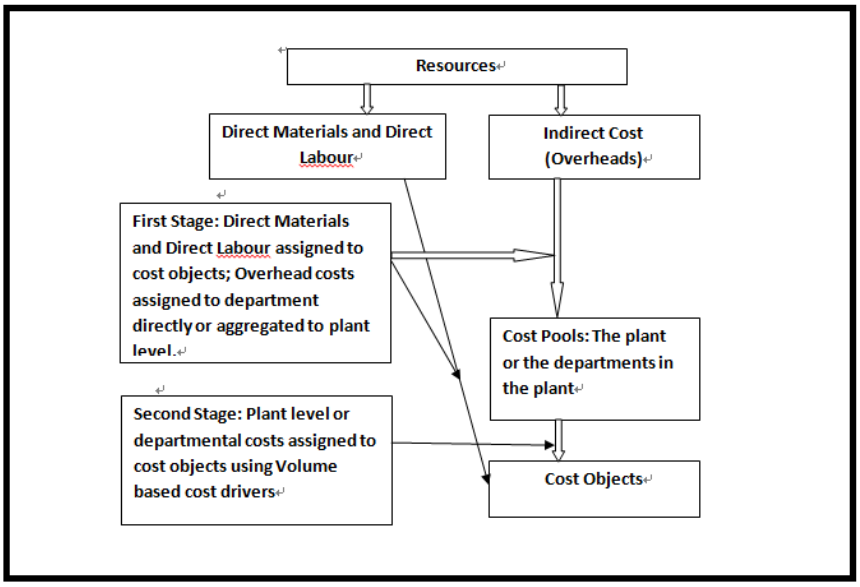

Figure 1:The Volume-Based Two-Stage Procedure

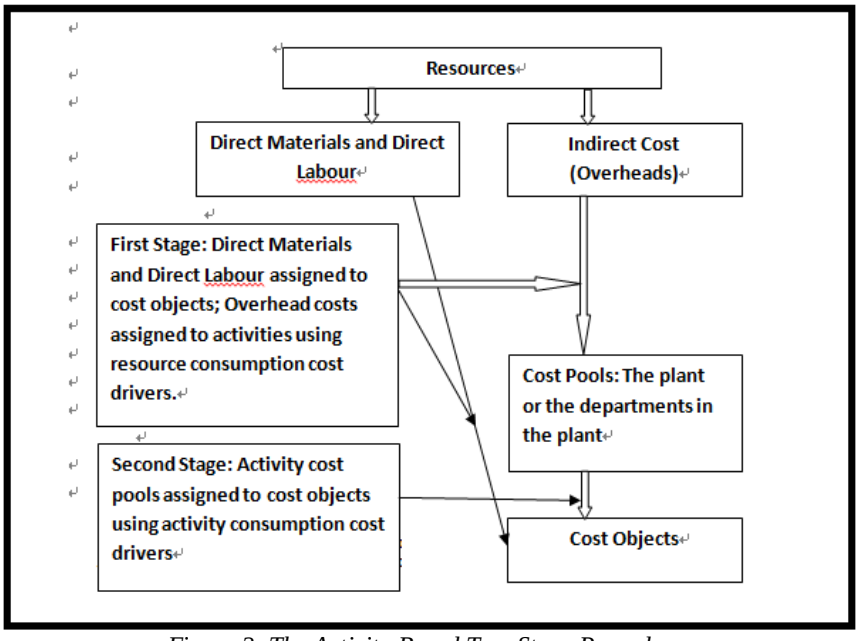

Figure 2: The Activity-Based Two-Stage Procedure

8. Steps in Developing and Activity Based Costing System

Developing an activity-based costing system entails three steps: (1) identifying resource costs and activities, (2) assigning resource costs to activities, and (3) assigning activity costs to cost objects.

9. Traditional Costing System Distorted Product Costs

Based on research, the researchers collected data for 25 of the company's products during the last half of1997 and grouped them into two product categories, high volume and low volume. They found that the unit conversion cost (direct labour and overhead) was 29.58 percent higher under traditional costing (using direct labour hours as the cost driver) than ABC (using 30 cost drivers) for high-volume products and was 45.95 percent lower under traditional costing than ABC for low-volume products. Their findings show that traditional costing overestimates the costs of high-volume products and underestimates the costs of low-volume products.[20]

The two-stage allocation procedure in an activity-based costing system identifies clearly the costs of activities of a firm. The assignment of activity costs to cost objects uses measures that represent the demands the cost objects make on activities of the firm. As a result, activity-based costing systems report more accurate product or service costs than traditional volume-based costing systems do.

10. Who Uses ABC and Why?

A 2001 survey of 166 users of ABC costing reported that most adopters used ABC to improve product costing, to assist in cost reduction, and to better assess the profitability of its products and customers. Other common uses were for process improvement, cost estimation, pricing, and performance measurement. Many of the surveyed firms are in the manufacturing industry, and ABC was critical in finding competition responses to industry price competition, identifying unprofitable products, and identifying unprofitable customers.

The survey also reported a significant diversity among these firms in the number of activities, cost objects, and cost drivers. While some firms had several thousand activities in their ABC system, the majority had between 25 and 250. Also, while some firms had several thousand cost objects, most had fewer than 100. The most common number of resource and activity cost drivers was occasionally over 100 but for most firms was between 6 and 10.

A 2005 survey of the members of Better Management.com validated these results. Drawn from 528 responses from the financial services industry, manufacturing, and communications and public service sectors, the survey found that improved product costing; better analysis of both product and customer profitability, and process improvement were the key goals of the ABC system. The usage of ABC was comparable across industries, though the manufacturing and financial services industries placed more emphasis on product and customer profitability, while in the public sector the key emphasis was on product costing and process improvement.[21]

11. Benefits of ABC

The costing methodology known as ABC yields cost information that may be significantly different than what is provided when the traditional absorption cost method is used. Perhaps now is the time for the project management profession to consider adopting ABC in evaluating project profitability (Kinsella, 2002).[22]

Moreover, ABC analysis enables managers to slice into the business many different ways—by product or group of similar products, by individual customer or client group, or by distribution channel—and gives them a close-up view of whatever slice they are considering. ABC analysis also illuminates exactly what activities are associated with that part of the business and how those activities are linked to the generation of revenues and the consumption of resources. By highlighting those relationships, ABC helps managers understand precisely where to take actions that will drive profits (Cooper and Kaplan, 1991).

Furthermore, managers can use ABC to analyze many other aspects of their company's operations. They can compare the profits that various customers, product lines, brands, or regions generate. Then they can zero in on the dynamic of the more-or less-profitable ones. For instance, a brand analysis could look at all the expenses associated with sustaining a brand, such as "Snappy Cereal", which includes a dozen different packages and flavors. Managers can judge the brand's profitability by matching the revenues earned from all snappy products against the expenses associated with promoting, adverting, and maintaining the snappy brand in the market place (Cooper and Kaplan, 1991).[23]

Finally, ABC is simple. For each process the costs buckets are identified, their cost drivers are discerned and the cost per driver is calculated. Costs are found by counting the drivers. If it costs $5 to invoice a customer and one customer generates a hundred invoices then the associated cost is $500. Another customer might generate ten or a thousand invoices and consequently have a cost structure which is quite different. The main work setting up an ABC program is identifying and calculating the cost buckets and cost drivers. This is the same groundwork required to re-engineer a business; including benchmarking, activity analysis and service level analysis. In its simplest form performance improvement can be seen in terms of time, cost, and quality. The relationship between performance improvement and ABC is noticeable. ABC has a moderate impact on time, a significant impact on quality, and a substantial impact on cost (Gering, 1999)

12. Criticism of ABC

Critics of ABC generally fell into inconsistent with the principles of continuous improvement and total quality management. ABC lacked customer focus, was not process-oriented, did not enhance organizational learning, and was top down in approach. The

other argued that ABC was inconsistent with the theory of constraints. A common argument was that ABC could not reliably measure the short-term impact of decisions on operating costs, inventory and throughput. It reflects a misunderstanding of the purpose and nature of ABC. Early versions of ABC were designed to reveal strategic insight into sources of profitability. The intention of ABC was neither to provide day-to-day guidance on process quality nor to measure short-term variable costs (Turner, 2005).[24]

13. ABC Applications in Government

The application of ABC at United States Postal Service (USPS) originated from the Post Master General's directive to develop a costing system that would help the USPS to become more competitive and to serve as a basis for comparing performance among the various mail processing facilities. The initial ABC system used 58 work activities and nine cost objects.The cost objects included handling of letters, flats, small parcels, large parcels, priority mail,express mail, registered mail, large mail containers, and small mail containers. In the initial application at a single mail-processing facility, there was a reduction of 13% in total cost as a result of the improved understanding of cost behavior in the facility. The USPS also used ABC to determine the cost differences in processing payments from customers who used cash, checks, or credit cards and from this analysis determined that the low-cost approach was to use credit cards. The ABC-based analyses have helped the USPS to implement an effective, cost-competitive strategy.

14. Conclusion

To gain better product costing and pricing, most of the companies have replaced their volume-based costing systems with activity-based accounting systems. Volume-based costing systems use a volume-based overhead rate, either a single rate for the entire plant or departmental rates. These overhead rates typically use measures such as direct labour-hours, machine-hours, or direct labour costs for all products or services, even if the firm has diverse products, manufacturing processes and volumes. For firms with more than one product or process, these overhead rates often generate inaccurate and significantly distorted product costs. ABC facilitates activity-based management that improves competitiveness, reduces costs, increases productivity, and augments flexibility in meeting customer needs. Activity-based costing (ABC) assigns costs to products or services based on consumption of resources and activities. It recognizes the fact that products or services are results of activities and that activities consume resources and incur costs. ABC systems use a two-stage procedure to assign costs to products or services. Activity-based costing helps to reduce cost distortions often found in volume-based costing systems and provides more accurate product costs. It also yields a clearer view of how a firm's diverse products, services, and activities contribute to the firm's bottom line. Even though developing and implementing an ABC system is expensive and time consuming, many firms found the benefit exceeds the cost of installing an ABC system.

Activity-based costing represents the symbol of improved competitiveness and efficiency in every organization. Firms implement the ABC system because it permits better tracing of costs to objects, superior allocation of overheads to cost objects, financial and non-financial analysis and measures useful to managers and management accountants in the decision making process rather than Volume based costing.To be successful, management accountants need to cooperate with engineers and manufacturing and operating managers to form a design team.

15. Acknowledgement

I am Dr. S. S Jeyaraj received my M.com degree from Madurai Kamaraj University, Madurai in 1996. I have been awarded my Ph.D degree on the title of "Occupational stress among the teachers of the higher secondary schools in Madurai district, Tamil Nadu", by Madurai Kamaraj University, Madurai in the year 2011. Also, I earned my M.Phil degree from Madurai Kamaraj University, Madurai, in 2001, thesis on the title of "Job satisfaction of workers. A study with reference to Sri Meenakshi Spinning Mills Ltd, Madurai". I have published research articles both in national and international journals and also attended various workshops and seminars. Previously, I have been working for International Junior College as a lecturer in business studies and Accounting at Jakarta, Indonesia from 2009 to 2014. Currently, I have been working as a Lecturer in Business School, Guangxi University for Nationalities [Staffordshire University Programme, UK], Nanning, China for International Junior College as a lecturer in business studies at Jakarta, Indonesia.

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