

Activity Based Costing System and its Succeed Implementing in Organizations

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Abstract: Lack of knowledge to the ones leading to ineffectiveness of launching and implementing activity based costing; budgeting and management systems will lead to wasting of financial and human resources in an organization. We should be aware of the ones bringing failure and we should try to put the approaches suggested in such an article from theory to practice consciously. In this article having had a close look at pros and cons of using ABC, the author has mentioned the different reasons of failures, when implementing, and the deterrent ways. The reasons can be classified in the five groups including deterrent reasons, technical weakness, the user denial, organizational obstacles and others. The deterrent reasons are the most common and significant ones. Technical weakness is due to factors stemmed from nature activity based systems. Also it should be noted that for some reason, the users may deny its usage and there are some obstacles in organization and the existing specific characteristics in entities will cause the system implementation failure. To know the issues and ones causing the issues and to avoid them is the origin of implementation and the success of such systems.

Key word: Activity Based Costing; Activity Based Management; Implementing; budgeting; management systems.

INTRODUCTION

To support compliance with financial reporting requirements, a company's traditional cost-accounting system is often articulated with its general ledger system. In essence, this linkage is grounded in cost allocation. Typically, costs are allocated for either valuation purposes (i.e., financial statements for external uses) or decision-making purposes (i.e., internal uses) or both. However, in certain instances costs also are allocated for cost-reimbursement purposes (e.g., hospitals and defense contractors). The traditional approach to cost-allocation consists of three basic steps: accumulate costs within a production or nonproduction department; allocate nonproduction department costs to production departments; and allocate the resulting (revised) production department costs to various products, services, or customers. Costs derived from this traditional allocation approach suffer from several defects that can result in distorted costs for decision-making purposes. For example, the traditional approach allocates the cost of idle capacity to products. Accordingly, such products are charged for resources that they did not use. Seeking to remedy such distortions, many companies have adopted a different cost-allocation approach called activity-based costing (ABC). In contrast to traditional cost-accounting systems, ABC systems first accumulate overhead costs for each organizational activity, and then assign the costs of the activities to the products, services, or customers (cost objects) causing that activity. As one might expect, the most critical aspect of ABC is activity analysis. Activity analysis is the processes of identifying appropriate output measures of activities and resources (cost drivers) and their effects on the costs of making a product or providing a service. Significantly, as discussed in the next section, activity analysis provides the foundation for remedying the distortions inherent in traditional cost-accounting systems.

One new method was activity based costing (ABC) which is of many advantages compared to traditional costing system based on volume (Baxendale *et al.*, 1998). So in order to enjoy its advantage, companies are willing to implement ABC system. Activity-Based Costing (ABC) arose in the 1980s from the increasing lack of relevance of traditional cost accounting methods. The traditional cost accounting methods were designed around 1870 - 1920 and in those days industry was labor intensive, there was no automation, the product variety was small and the overhead costs in companies were generally very low compared to today. However, from the 1960s - particularly 1980s - this changed rapidly. For these reasons, and more, traditional cost accounting has been called everything from 'number 1 enemy of production' and questions whether it is 'an asset or a liability' have been raised. An activity based costing (ABC) system recognizes the relationship between costs, activities and products, and through this relationship assigns indirect costs to products less arbitrarily than traditional methods.

We should implement ABC systems consciously, intelligently and conservatively. Since being successful in doing such a project is not as much as we imagine. Practically, Activity Based Accounting (ABC) System recognizes the relationship between necessary activities and costs in order to render services which make economic value for the organization (Horngren *et al.*, 2005). Activity Based Accounting System is derived from this belief that products use activities and activities use resources and it leads to decimation of value adding

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activities and non-value adding activities (Wickramasinghe and Alawattage, 2007). In fact, by the use of this method, cost of each product or service equals total cost of activities relevant to the production at that product or service. In traditional costing, costs are generally allocated on the basis of the volume while according to the costing thinking and activity based management, products and the produced services are not directly users of the resources but are users of the activities (Johnson and Kaplan, 1987).

Therefore, Activity Based Accounting System is one of the most modern costing systems; such as system can alone or with current costing systems be applied to provide essential information to make decisions (Hornigren *et al.*, 2005). As the zone of market changes, companies as well as organizations try world competitions in which more and more information and technology of information is of need to win. ABM and ABC are of pioneer systems in this field (Kuchta and Troska, 2007) and have made organizations and companies use them. If we are aware of factors affecting implementing and running, it will help the system to reach its goals successfully and prevents waste of financial as well as intellectual capital and then leads to more organizational participation and trust (Cokins, 1996).

What is abc System?:

Activity Based Costing (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. It is developed to provide more-accurate ways of assigning the costs of indirect and support resources to activities, business processes, products, services and customers. ABC systems recognize that many organizational resources are required not for physical production of units of product but to provide a broad array of support activities that enable a variety of products and services to be produced for a diverse group of customers. The goal of ABC is not to allocate common costs to products. The goal is to measure and then price out all the resources used for activities that support the production and delivery of products and services to customers. An organization performs activities to do its business. These activities define the kind of business you are in: a ship owner has an activity to unpack boats; an accounting firm prepares tax returns; a manufacturer produces products; a council delivers services; a university teaches students. All activities consume resources. It is the consumption of these resources that adds to overhead costs.

The basis of Activity Based Costing is: look at the activities required to produce the cost of the product or service. The activities consume resources and the cost of these can be calculated. The amount of activity required for each product and service is determined, hence the real cost can be determined. While traditional costing arbitrarily allocates overhead costs, ABC traces overhead costs by looking at the activities that each product and service calls upon. With ABC the products consume the activities. It is the activities that cost money.

ABC can be an axis around which complex particles of advanced cost management system keep and if implemented carelessly and unthoughtfully, it can neutralize total cost management. However, the effective usage of ABC system will lead to increase the company value since by using ABC technology; we can identify the cost of the inefficient methods of program and process and can identify and measure the saving amount of improving such methods. Also redesigning the programs by an ABC analyzer with efficient processes will lead to cost decreasing and quality improvement and plan-performing and effectiveness of budget planning. They are the best results we can expect one system in the present global competition. Activity-based costing assumes that the steps or activities that must be followed to manufacture a product are what determine the overhead costs incurred. Each overhead cost, whether variable or fixed, is assigned to a category of costs. These cost categories are called activity cost pools. Cost drivers are the actual activities that cause the total cost in an activity cost pool to increase. The number of times materials are ordered, the number of production lines in a factory, and the number of shipments made to customers are all examples of activities that impact the costs a company incurs. When using ABC, the total cost of each activity pool is divided by the total number of units of the activity to determine the cost per unit.

Hornigren, *et al.*, (2005) believes that Activity Based Accounting System is one the most modern costing systems which can separately or with current systems provide proper information for decision making. Prior to this, Cooper and Kaplan (1991) claimed that companies can decrease costs, run modern pricing politics, recognize improvement opportunities and specify product combinations if they apply reliable financial statements approved by ABC system. To sum up, Activity Based Accounting System is better and more accurate in comparison with traditional Accounting system, though there are a lot of obstacles ahead of them. One of the biggest problems that this system faces is that companies know how to implement a new system but they do not know enough why they should do such activities and ignore them (Kuchta and Troska, 2007). Now, it is turn to look for and find the obstacles in implementing ABC plans. To be aware of different reasons of failures in implementing ABM/ABC plans can increase the success possibility in the future plans.

The failure reasons for some abm/abc Systems:

In most cases, a company's traditional cost-accounting system adequately measures the direct costs of products and services, such as material and labor. As a result, ABC implementation typically focuses on indirect

costs, such as manufacturing over-head and selling, general, and administrative costs. Given this focus, the primary goal of ABC implementation is to reclassify most, if not all, indirect costs (as specified by the traditional cost-accounting system) as direct costs. As a result of these reclassifications, the accuracy of the costs is greatly increased.

According to Ray H. Garrison and Eric W. Noreen, (1999) there are six basic steps required to implement an ABC system:

1. Identify and define activities and activity pools
2. Directly trace costs to activities (to the extent feasible)
3. Assign costs to activity cost pools
4. Calculate activity rates
5. Assign costs to cost objects using the activity rates and activity measures previously determined
6. Prepare and distribute management reports.

While ABC systems are rather complex and costly to implement, Charles T. Horngren *et al.*, (1999) suggest that many companies, in both manufacturing and nonmanufacturing industries, are adopting ABC systems for a variety of reasons:

1. Margin accuracy for individual products and services, as well as customer classifications, is becoming increasingly difficult to achieve given that direct labor is rapidly being replaced with automated equipment. Accordingly, a company's shared costs (i.e., indirect costs) are becoming the most significant portion of total cost.
2. Since the rapid pace of technological change continues to reduce product life cycles, companies do not have time to make price or cost adjustments once costing errors are detected.
3. Companies with inaccurate cost measurements tend to lose bids due to over-costed products, incur hidden losses due to under-costed products, and fail to detect activities that are not cost-effective.
4. Since computer technology costs are decreasing, the price of developing and operating ABC systems also has decreased.

In 2004 John Karolefski cited the following benefits realized by foodservice distributors and restaurants that have converted to activity-based costing practices:

1. Understanding the true costs and productivity of capital equipment
2. Understanding which products are most profitable and where to focus sales efforts
3. More accurate pricing and determination of minimum order size
4. Less time, money, and effort spent on the wrong products

Implementation costs are an obstacle to some, who feel that ABC is just a fad or will show little benefit.

According to Karolefski, "ABC works better if it's kept simple" (2004, pp. 18). Nevertheless, when implemented properly ABC yields benefits to the company, its business partners, and to consumers.

One significant way for achieving the success is not to repeat the mistakes done by others and to give credence to the ones leading to failure in other ABC plans. To know the failure reasons will aid to implement the system consciously and to avoid them can be effective higher successes. An increase in success chance can avoid wasting the financial and intellectual capital investments noticeably and can boost the organizational cooperation.

Generally speaking, there are many reasons for the issues existed in implementing ABC plans which can be classified into the following ones (Cokins, 1996).

1. The deterrent reasons
2. Technical weakness
3. The user denial
4. Organization obstacles
5. The others

The Deterrent Reasons:

The deterrent reasons, the most significant and common ones, are the same as follows.

- How to act to implement and launch the new project is of significance. In appropriate launching will result in missing the next stages for implementing the system. There will be many forms for launching activity based costing and operational budgeting and sometimes combination of which is the best choice. Using many stimulated projects has a high effect on the right selection and individual understanding of the modern systems. Using planners and users, visual sense is effective in fast identifying the possible weakness before implementing the system.

- When ABC systems are launched, only by using the financial and accounting parts (or accountants over use it) and cooperation of other effective concerned parts are not used in implementing the system and it is not enjoyed intelligently and it is changing to the ordinary one the same as many financial and management activities. So before implementing ABC systems, we should be aware of some information needed and facilities for transferring the information for operational parts to launch and go on implementing ABC systems based on them.

Holding some conferences and free discussions, transferring and using the results obtained in organizations and using other ways to attract the employees, cooperation will increase the success degree of the new systems (Cokins, 1996).

-If the new innovations of ABC system are an ordinary, predetermined and aimless method, new models or systems will be made illusively. Such systems are to remove the inefficiency of the innovated traditional systems and their objectives are to meet the information needed for the users. So helping to solve issues pertaining to information in an organization and to promote the organization will aim to increase in applying the new system. So in implementing stages, we should have a continual contact with the users and also try to identify their issues and to receive the on-time feedback by the users to make ourselves satisfied with the condition provided by the system.

-When there is a belief that measuring data related to ABC system for the users is very enjoyable. In fact without any planning, it is not possible for the users to take advantages even though the new information maybe of some useful hints. The users should try to know how ABC has improved the existing financial and budget reporting and also try to make themselves aware through different stages of tracing the cost of activities and costing subjects and programs.

-When Information available in ABC system become like a reviewed book and compared with previous accounting and official systems. There is a connection between evaluations of employees, working and official systems and using ABC systems in a wrong way in such organizations will result in encouraging the wrong behaviors continuously (Cokins, 1996).

-Persisting against changes have been underestimate, the managers and employees who are not aware of financial issues think that a successful financial system is one which provides financial report monthly and balances books of accounts. Their questions is that " what is the problem existed in a system obtaining the optimum results monthly?" We should show carefully and patiently the disadvantages of the traditional system based on volume and the potential improvements of new system and its effects on correcting the past wrong decisions and improving the resource allocation. Introducing the new system effectively is of significance. ABC may be simply considered as a costing system with more details.

-When many users don't trust to the new accounted figures of ABC system and such a view has been underestimated by designers. Tracing the cost by ABC system in a right way, we can find that there is a significant difference between the results obtained from the product cost, services or outputs of a process. Such a difference will make one doubt and even one strong organizational shock. So, the result obtained and its documentation should be transferred to different centers in an organization gradually (Cokins, 1996).

-When ABM systems have a great effect on some parts of an organization. For example when the managers in charge of producing goods with certain profit observe that the accounted profit in the traditional systems has been decreased or changed to loss by ABM/ABC calculation, they will object to ABC systems in an organization.

-When ABC system will not contribute to officials in accountability process. One significant feature in such systems is to facilitate and to improve the responding process and to be clear in responding with the budgeting and) planed standards and to evaluate the managers achievements. The effect scope of ABC system to achieve the goal, the budget and facilities provided used is potentially much more developed than the traditional systems.

Technical Weakness:

Technical weaknesses ones are originated from issues related to nature of ABC system and are the same as follows:

-When understanding information and the financial issues is difficult for most ordinary people, we know that the new accounting and budgeting information cannot be transferred to people obligatory, and we should try to make people aware of advantages of ABC systems as a comprehensive information system and also try to make them aware of disadvantages of the traditional systems and we should allow them to understand its advantages consciously. Although ABC system is a system of fame for its costing role, such a role is only one of its basic functions not all functions.

-When activity cost drivers do not reflect the consumption rate or pattern related to various activities and there is a weak correlation between activity costing and activity drivers. And due to this reports of ABC system seems wrong and far from reality. When selecting cost drivers, some factors including cost of driver's determination, correlation between activities and activity drivers and behavior effect stemmed from driver's determination should be taken into account.

-Design engineering of ABC systems may be very strict and pay attention to details extremely. In designing any system, there should be a logical exchange between details or complexity and interests extracted for information using. Although paying attention to the details will increase system exactness but sometime, the added exactness and will not make any change in decisions made i.e. It. it is not related to make decision. In other words, such a method will increase cost of new system and will make the new system unjustifiable based on cost-benefit standard(Cokins, 1996).

-Another disadvantages of such systems are that activities in such systems have not been defined exactly and there are many kinds of activity cost drivers and there has not been specific cost object which consume activities. When designing ABC systems, we should have a close look at identifying the activities and classifying the similar activities and also avoiding a large number of costing centers and activity levels (Cokins, 1999).

-To collect the information needed for activity-based systems in early stages of implementing is of difficulty. Since data resources and provider are not aware of related and unrelated information. Much forgotten information which has not been used in traditional systems will be used in ABC system and such an issue will make the users in doubt.

The user denial:

Sometimes, the users may deny using ABC system for the following reasons:

-When employees in various parts do not know how to react against the new information for instance, selling and marketing employees do not know how to react against the new results obtained by selling new products and they show wrong behaviors. Do they go on their activities i.e. producing, marketing, selling and services now? ABC system is able to solve minimizing and maximizing product cost issue in high volume product cost issue in low volume and through this, such a system can give new information to the decision – makers (Cokins, 1996).

-When ABC system does not provide all necessary information for making producing–decision and planning and does not reflect various and wrong use of sources and their costs in a good way. Using ABC system, we may find new results on market strategies, goods producing in trade circle and following this, much more information made be used by the managers in decision – making on customers, market and function related to this.

-Plans in ABC system is viewed as a competitor improvement program. ABC system can increase the capabilities in the existing improvement programs. The main point is that continuous improvement is a survival myth of an organization in today's competition trade environment. In such an age i.e. information technology and using new sciences, designing, and implementing the new information systems which are of much more real output are much more essential for an organization. The new system should be much more understandable and be able to boost organization learning. It would better to determine the goals expected by an organization. First, we can use new system in one specific part then generalize and develop it to other parts gradually (Cokins, 1996).

-Data in ABC system may bother some employees. It may make employees review their method of working and also it may cause to consider new ways for doing works or delete and substitute some employees or equipments. Deleting and outsourcing activities recognized valueless should be done carefully. ABC system will make head of every center in an organization do his/her job in an effective way so that product costs and function can be measured much more fairly. When employees understand the new system much better, they will be much more motivated and they will resist against changeless and as a result they will play better in decision made by the organization.

Organizational Obstacles:

The organizational obstacles in ABC system are the same as follows.

- The first thing a business must do when using ABC is set up a team that will be responsible for determining which activities are necessary for the product or service in question. This team should include experts from different areas of the company (including finance, technology, and human resources) and perhaps also an outside consultant. To launch a project well is always of importance but sometimes the other steps will be taken slowly if the various steps to launch ABC plans take a long time, much energy and human sources will be destroyed. Sometime the employees with such a feeling (often true) that managers themselves don't believe in effective performance of new system will miss their early motivation. It is also essential to use a full-time team working on implementation project in order to put an end to implement project in a logical time. If so much more attraction are paid to apply such a new system. To have a time – table even for the coming years and to have a perspective for the future goals and what should be done. Will facilities to evaluate function of group responsible for finishing the project in a logical time.

-When the considerate part is center of cost system and is not of responsibility against loss and profit, it will be considered less and less and will not make any attraction for launching new systems. To make familiar different parts of an organization including cost center with each other and to make competition among them via encouraging to be much more efficient and to delete additional or value less activities will lead to make applying new systems attractive. On the other hand, there may be wrong belief that activity based costing system is not useful for non-profit centers such as governmental offices and may be avid to be present in such organizations. It is obvious that such a system is a kind accelerating movement for improvement in every condition.

-There is a long belief that costs of every product or service has been accounted in a wrong way, when there is a little difference on results and figures of the new system and it will result in a little change in the final

prices. The documents simplified should be received by every body in order to understand the differences between measurements practically (Cokins, 1996).

- When the high ranking officials are responsible directly for running the ABC operation. And define standards and activities. If so, they stop the users and employees cooperation and many advantages of the new system will be destroyed.

- Using new techniques of cost management to improve supporting decision will lead to the past experiences in the new system are not used and if training and changing the views do not occur, the new systems will not be used in a good way.

- When fame and validity of activity based management or costing are destroyed by the opponents and under the pretext of being expensive and inefficient. A good solution to tackle such an issue is to present successful experiences by other corporations and the effect of using activity-based management and costing to improve their condition.

The other cases:

The other effective factors on activity based management or costing success are the same as follows:

- The leader of designing team is not of enough braveness to make changes needed. The leader should be one much more interested one among other qualified persons and should be ready to receive information and analyze it and also working under hard conditions. The leader also can make decision to use the seasoned advisors. The seasoned advisors will provide a clear perspective to do capacities necessary for the system. However, it is of importance the advisors should not be responsible for doing a project. The designing team is responsible for doing a project (Cokins, 1996).

- Training and awareness will happen on ABC systems when the internal users are enjoyed the advantages of using such a system and all persons based on qualifications and organizational position are trained or they will use the system unconsciously in a wrong way. The managers and implementer of such a project should try not to be deceived by such an attitude that "the details activity based management and costing has been given to all".

- When the data measurable such as the number of material movement, time of doing various activities, the amount of using sources... are not ready and are out of reach. So in designing stage, knowing and documenting and making the quantitative data needed is of significance (Cokins, 1996).

- When the scope of cost model is only restricted to producing operation and many significant activities in organizations such as research and development, designing, marketing, distribution and after-selling services are not included. Activity-based management and costing are one part of the whole body of total quality system in an organization which is effective on other parts in an organization.

- Documenting every new system is of significance and will increase its efficiency. One danger existing is that such documents when being prepared are considered as a successful project which has met its final goal. However, documenting is a stage which the real function i.e. implementing ABC system as a strategic management tool in all body of organization has been started (Cokins, 1999).

- Using one strategic plan is much more useful. In such a plan, different parts of value chain of organization, its objectives, the way of effect of new system on such parts, expectation of the new system, etc. are clarified.

Conclusions:

Activity-based costing programs require proper planning and a commitment from upper management. If possible, it is best to do a trial study or test run on a department whose profit-making performance is not living up to expectations. These types of situations have a greater chance of succeeding and showing those in charge that ABC is a viable way for the company to save money. If no cost-saving measures are determined in this pilot study, either the activity-based costing system has been improperly implemented, or it may not be right for the company. To implement new informational management and budgeting systems like ABC in organization is inevitable. So, for many different reasons the success is such systems when they are implementing is not so much. Such reasons can be classified in the five following groups including the deterrent reasons, technical weakness, the user denial, organization obstacles and the others. The best solution to the problems existing for implementing ABC systems is to train employees and managers in a good way and to make them much more aware of the new system and also to introduce their advantages in the organization concerned. The head of the designing team of Activity Based Costing System should be brave enough; he/she should be the most interested person among all qualified individuals; he/she should be interested in consulting the matters with experienced counselors. Universities should also train students regarding Activity Based Costing System.

All taken together, implementing and launching Activity Based Costing System leads to less failures in companies; otherwise, while implementing and launching the system, different weak points of the system would be known; items which already have been predictable and controllable but not enough attention has been paid to them.

In general, to know the failure reasons for implementing ABC systems will lead to decrease and minimize the failure possibility. Such reasons can be predicted before and when they are ignored the new system will be failed. To reform the system, many financial and human sources will be destroyed. Being aware of the failure reasons we can find the solution to remove the problems and we can pose new approaches to achieve success. Therefore in such condition, organization can enjoy advantages of ABC systems and finally increase its value.

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