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THE NEED FOR ACTIVITY BASED APPROACH IN MANAGERIAL ACCOUNTING APPLICATIONS

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Özet: Değişimin önünde durmak, değişime direnmek imkansızdır. Özellikle son yıllarda teknolojide meydana gelen değişim, pek çok bilim dalında kullanılan yöntemlerin yeniden sorgulanmasını gerekli kılmıştır. Bu sorgulamadan muhasebe bilimi de nasibini almaktadır. İşletmenin faaliyetler bütünü olarak algılanmasını bir uygulama sistematiği olarak ortaya çıkaran faaliyet tabanlı maliyet yönetimi, işletmede yönetsel kararların daha sağlıklı verilmesine yardım eden bir düşünce sistematiğidir. Bu sistem kaynağını, faaliyetleri süren etkenlerin bulunması ve geleneksel dağıtıma böylece son verilmesini hedefleyen faaliyet tabanlı maliyetlemeden alır. Faaliyet tabanlı yönetim ise hem faaliyet tabanlı maliyetleme yaklaşımının hem de faaliyet tabanlı maliyet yönetiminin uygulamaya konulmasını sağlayan bir felsefedir.

I. INTRODUCTION

As information technology evolves, organizations will increase their effectiveness. Further more, as markets change, companies and organizations will run into global competitors that increasingly look to information and information technology for competitive advantage. Activity – based management is involved in this broad arena of "outsmartsmanship" [1].

People usually consider accounting to be "financial." But this is valid only for the part, going back 700 years, that deals with assets, liabilities and cash flows; it is only a small part of modern accounting. Most of accounting deals with operations rather than with finance, and for operational accounting money is simply a notation and the language in which to express non-monetary events. Indeed, accounting is being shaken to its roots from being financial and towards becoming operational [2].

II. THE CHALLENGE TO THE TRADITIONAL METHODS

There is the new "transactional" accounting that attempts to relate operations to their expected results. There are attempts to change asset values from historical cost to estimates of expected future returns. Accounting has become the most intellectually challenging area in the field of management, and the most turbulent one. All these new accounting theories aim at returning accounting data into information for management decision making. In other words, they share the goal of computer-based data processing [2].

For management accountants the most important changes in the last few decades have resulted from the rapid movement to more automated and integrated business methods. These new methods damage managerial accounting forms of analysis because they violate the unspoken assumptions in the traditional techniques. For example, traditional production accounting methods assume that direct labor drives most cost, yet it is known that this not happen in factory automation. The new environment violates other assumptions, such as the little recognized fact that standard costing is useful for control purposes in situations with low to medium amounts of variability, but not in situations with high variability or the extremely low variability that is seen in advanced manufacturing technology [3].

Cost or management accounting systems have two major purposes: product costing, and planning and control. Cost accounting techniques for fulfilling these purposes include [4]:

- ✓ Cost / Benefit tests for designing and changing management accounting systems – Elaborate systems are expensive and time consuming, but managers authorize their installation and adaptation only if doing so will sufficiently improve collective operations.
- ✓ Product costing and control systems that are tailored to underlying operations, not vice versa.
- ✓ Control devices in all product costing systems – These systems include responsibility accounting, budgeting, and variance analysis.
- ✓ Various resources of management information in addition to management accounting systems.

As we have already pointed out, traditional cost systems put most their effort into capturing material and labor costs. All other cost are relegated to overhead accounts. At the same time, management has come to accept overhead as a given and believe that there is not much a manager can do to improve upon this cost area. In the minds of traditionalists, it is the **cost of doing business.** Therefore, the great majority of effort is put into improving upon labor and material costs. There are two things wrong with this reasoning. First, traditional cost systems rely on far too few elements of production cost to paint a realistic picture. Second, this reliance upon three elements of cost (labor, material, overhead) hides the real opportunities for improvement. In order to rectify this situation, accountants need to restructure their system of reporting costs so that it monitors and controls many more elements and identifies these elements back to correct product and level. This will entail addressing the cost of number of functional activities within manufacturing and beyond. The managers need systems which will report on the activities of Sales, Engineering, Finance and Procurement as they relate to each product [5].

Activity-Based Costing change process begins with the organization identifying the activities, which are being performed by its resources. Resources are defined as any cost creating entity, which is utilized to operate an organization's business. People, machines, equipment and even money are just some of the vital resources, which a company needs to operate. Knowing how the resources are utilized is at the core of an activity-based system. But knowing how they are used is not always readily apparent and that is why the identification of cost activities begins with the discussion of resource utilization [5].

Activity-Based Costing yields much information about activities and the resources required to perform these activities. Thus ABC is much more than a cost assignment process. ABC supplies the information and activity-based management uses this information in various analyses designed to result in on going improvement. ABC contributes to cost reduction in marketing and administrative activities as well as improves product costing the concept underlying ABC – that activities consume resources and products require activities- apply as readily in service organizations as they do in manufacturing organizations [6].

In a narrow sense, activity-based costing can be considered the mathematics used to reassign costs accurately to cost objects that is, outputs, products, services, and customers. Its primary purpose is for profitability analysis. Activity-based cost management (ABCM) uses the ABC cost information to not only rationalize what products or services to sell but, more important, to identify opportunities to change the activities and processes to improve productivity. Activity-based management (ABM) integrates ABC and ABCM with non-cost metrics such as cycle time, quality, agility, flexibility and customer service. ABM goes beyond cost information [1].

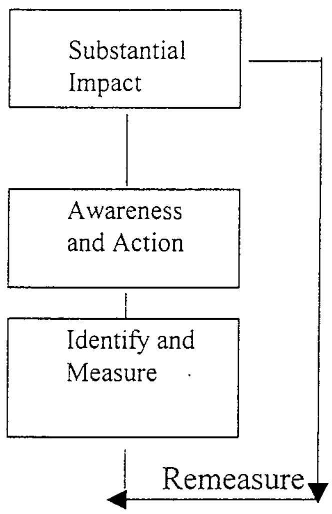
The relations between ABC, ABCM and ABM can be summarized as below [1]:

Table.1. The Relationship Between ABC;ABCM; ABM

ABM: <u>Activity-Based **Management**</u>
Making proactive strategic and operating **decisions** based On activity information and **assessing** the value-adding Content of work in business processes.

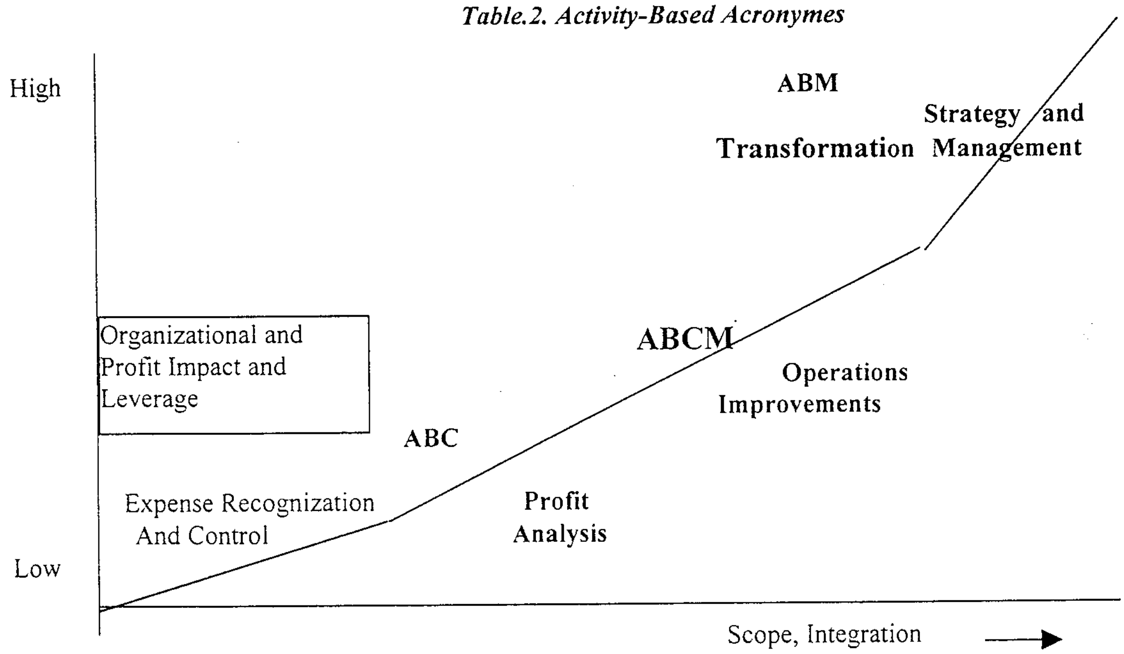
ABCM: <u>Activity-Based **Cost Management**</u>
Understanding the **Cost** structure, behavior, and economics Of an organization to improve operations.

ABM: <u>Activity-Based **Costing (The Math)**</u>
Reassigning resource costs **through activities** and Eventually **into** an organization's outputs



Activity – Based Information Acronyms are as shown on the figure below [1]

Table.2. Activity-Based Acronymes



As defined above, activity-based management is an approach to managing an organization that includes identifying all major operating activities, determining what resources are consumed by each activity identifying how resources are consumed by each activity, and categorizing the activities as either adding value to a product or service or not adding value. Activity-based management is beneficial for both strategic planning and operational decision making because it provides financial and operational performance information at the activity level that is useful for making decisions about business segments, such as product lines, market segments, and customer groups. It also helps managers eliminate waste and inefficiencies and redirect resources to activities that add value to the product or service. Activity-based costing –as mentioned above- is the tool used in an activity-based management environment to assist in assigning activity costs to cost objects for costing and decision making. Activity-based costing helps managers make better pricing decisions, inventory valuations, and profitability decisions [7].

Activities and strategies are closely linked in ABM because strategic choices drive activities. ABM deals with activities and costs that can be changed only gradually, which reflects the long-term perspective taken by ABM and it concern with strategic issues. Support costs ordinarily cannot be changed in one week. Over time, however, changes that occur in a company's production methods, product design, and marketing strategy ultimately affect the company's indirect support costs [8].

Activity-Based Cost Management systems have emerged in companies where managers believe that the cost of additional measurements by the ABCM systems are more offset by the benefits the new systems can provide. The managers associates three major benefits of categorizing activities in an ABCM system [9]:

- ✓ Improved decision making due to more accurate product costs,
- ✓ Improved insights in to managing the activities that lead to traditional fixed costs,
- ✓ Easier access to relevant costs for a wider range of decisions.

Distorted knowledge of product costs makes it difficult for management to know how to best employ the resources available and satisfy its primary responsibility. Unfortunately, although it is relatively easy to prove that a cost system is reporting inaccurate product costs, it is extremely difficult to prove that the firm is suffering because of it. No business decision depends solely on product cost information is commonly used in decisions that rely on a wide range of information. The symptoms of reliance on distorted costs can be used to determine whether the cost system needs redesigning. This approach is advantageous because it is relatively fast and inexpensive. It is not, however, a perfect test. First the symptoms are not always easy to detect, and the inability to detect them does not guarantee that the firm is not suffering. Second, there are several competing explanations for each symptom, and it is not always possible to rule them out. The risk of unfairly blaming the cost system can be reduced by determining whether it suffers from one of the more common design flaws [10].

Supply chains and value chains are the two tools of activity-based management that helps managers better understand their organizations either internal and external operations.

A value chain analysis is essential to determine exactly where in the firm's segment of the chain – from design to distribution – costs can be lowered or customer value enhanced. The value chain framework is a method for breaking down the chain – from basic raw materials to end-user customers – in to strategically relevant activities in order to understand the behavior of costs and the resources of differentiation. Any firm is the typically only one part of the larger set of activities in the value delivery system. Suppliers not only produce and deliver inputs used in a firm's value activities, but they importantly influence the firm's cost or differentiation position as well. Similarly, distribution channels have significant impact on a firm's value activities [11].

A supply chain is an interdependent collection of organizations that supply materials, products, or services to a customer. When managers understand their product's or service's supply chain, they can better understand their organization's role in the total process of creating their product or service and delivering it to customers. Every organization can create a variety of supply chains because of its variety of suppliers and customers [7].

A company can enhance its profitability by understanding not only its own value chain, but also how its value-adding activities fit into its suppliers' and customers' value chain. Working with suppliers and customers across the entire supply chain provides opportunities to reduce the total cost of making a product, even though costs for one activity may be increased. When organizations work cooperatively with others in their supply chain, new processes can be introduced that will reduce the total cost of products or services [7].

Managing costs effectively, requires abroad focus, external to the firm. This approach can be analyzed in the strategic cost management framework. This perspective has been termed "value chain" by Porter. The external focus sees each firm in the context of the overall chain of value-creating activities of which it is only a part. Value chain analysis is contrasted with value-added analysis, which starts with payments to suppliers (purchases) and stops with charges to customers (sales), while focusing on maximizing the difference, the value added (sales minus purchases) for the firm [12].

III. CONLUSION

The potential benefits of ABCM can be analyzed in advance along two separate dimensions. The first is based on the probability that, in a given application, ABCM will produce costs or other results that are significantly different from ones that could be generated with more conventional or less costly methods. The ABCM – generated costs may or may not be "better" or more accurate, but they are different in amount. The second dimension of the model seeks to establish that, given that cost information generated by ABCM is indeed different, management will use it for significant decisions. Managers must regard ABC information as superior, and the nature of the organization and its competitive, legal and social environments must allow managers to use information freely [13].

Top management must take the initiative in decision making and action to demonstrate to other employees and stake holders that they are serious about improving the competitive position of the firm. Top management must establish strategic goals for cost reduction. These goals should be based on supporting or reinforcing the firm's core competencies and competitive strategy. For example, top management may decide that the best way to reduce cost and to increase both quality and flexibility in the long-term is by exploiting the firm's competence in mechanical, manufacturing, and software engineering by implementing CIM (Computer Integrated Manufacturing) [14] or by looking at the firm as a total of value creating activities. So, the top management may decide to eliminate the activities that are consuming time and labor force or causing cost. This may be named "Cost- Conscious Culture" . Top management is responsible to develop this culture through the all firm. The goal of the cost-conscious culture can be summarized as the continuous improvement of quality, time, and cost through innovation.

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