

## Why Process Oriented Management Accounting Techniques are More Useful to Handle New Era Problems

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**Abstract** *The paper specifies its focus on rapid transition in management accounting techniques to process oriented techniques and to profoundly study new developments in management accounting system in last few years. The purpose of the paper is to bring newer and modern management techniques to light, such as TQM, the Balanced Scorecard, Activity Based Accounting, Target Costing and Just-in-Time (JIT). These tools really help management accounting to reduce accounting transaction and to find more approximate cost of product in detail showing participation of every department and much more help in budget process and revenue recording for each department. The traditional management accounting tools, e.g. Budgeting, Standard Costing, Cost Volume Profit (CVP) analysis and financial performance measurement are also very useful but to work with today's customer focused environment and to measure the financial and non financial performance of the organization, less cost, more revenue and performance, the process oriented management accounting techniques are more useful.*

**Key words** Management accounting techniques, JIT, TQM, Balanced Scorecard, Process oriented management accounting techniques

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### 1. Introduction

The roots of Management accounting system in the form of traditional budgeting methods, long run investment evaluation, cost allocation or profitability examination are as long as the life of that organization is. According to Mathews and Perera (1996), Mesopotamian civilization were keeping accounting records of property ownership and business transactions from as early as 4500 B.C. Whenever any business activity is carried out or performed; other than at an individual or family level, an organization-type structures come into being, rapidly followed by some form of accounting. (Gowthorpe, 2008). A rapid change in business organization environments has forced many organizations to shift from traditional processes to contemporary business processes to be pro-active and competitive in business world.

Management accounting system has been equipping organizational managers with important information to take decision and deals with both constant timely and frequently changing business dealings i.e. order received, order backlog, capacity utilization, and sales. Other analytical reports are prepared for decline in profitability, market share shrinkage, customer loyalty disruption towards the organization. In both cases, it is usually done through comparing actual results with the planned results or benchmarks. Management accounting is about "the process of identifying, measuring and communicating economic information to permit informed judgments and decisions by users of the information" (D. Colin, 2000).

Management accounting usually plays as an influencing role for planning, organizing, leading and controlling through managers of the organization. Planning activity is done mostly through budgeting, standard costing, target costing, cost-volume-profit analysis and directing or organizing through process reengineering, just in time (JIT), activity based costing (ABC), flow direction, value proposition. Leading and

controlling through total quality management (TQM), balance score card (BSC), actual and budgeted performance comparison, benchmark analysis.

### **1.1. Purpose**

The modern management accounting system enables an organization as a whole to improve the innovative capacity of the organization and flexibility so that it can continuously develop and improve its financial as well as non financial performance areas. So it is essential to have a clear idea of transition of management accounting system from traditional orientation to process orientation.

The purpose of this paper is to exhibit the transformation of the management accounting system towards process orientation. Though traditional management accounting tools such as standard costing, variance analysis, or standard budgeting and based on that performance analysis and cost volume profit analysis are said to be less useful for current contemporary manufacturing environment. Since transforming to modern management accounting techniques i.e. balance score card, target costing, and activity based costing, just in time and total quality management are not easy to adopt as many factors are associated in the form of time, financial and non financial resources, technological know-how and most importantly external players. The decision is considered to be an intelligent one if the shift is made after the cost benefit analysis. So here the purpose is not only to demonstrate the transition but also to elaborate the reason for transition.

### **1.2. Problem**

Traditional management accounting techniques such as standard costing and variance analysis, traditional budgeting and cost volume profit analysis if are compared with the modern techniques; then they are no longer considered to be incredibly important by manufacturing organizations. As it has become inevitably important for the corporations to compete in global market, so to succeed in the present dynamic business environment, tools or strategies such as JIT, ABC, TQM, process re-engineering, life cycle assessment and target costing should rapidly replace traditional techniques (Sulaiman *et al.*, 2004).

Because of the new traditions and customer attitudes (both internal and external) the management has to change their costing behavior, their accounting practices to make the flow of transactions easy, effective and explicit recording of entries due to the advancement in production and operational techniques e.g. JIT, ABC, Six Sigma, TQM, transfer pricing issue. So, the traditional management accounting transforms to process oriented management accounting to handle all new era problems.

## **2. Theoretical frame work**

The 1980s saw the emergence of a great deal of criticism of prevailing management accounting practices. It was argued that management accounting system has failed to develop itself throughout most of the twentieth century and that its ingrained practices were increasingly irrelevant to the modern business (Gowthorpe, 2008). Johnson and Kaplan (1987) have made up a strong indictment “lost relevance,” epitomize a widely-held perception that management accounting has failed to grow in a manner compatible with a changed technological and competitive environment (of the business world). To cop up with the present dynamic business environment the requirement of advanced management tools and techniques is increased. So the management accounting tools may be divided into two parts to understand the advancements in the methodologies as traditional management accounting and process oriented management accounting. This paper will more focus on process oriented management accounting tools with the help of latest operational tools and their relation with management accounting.

### **Process oriented management accounting tools**

Last two decades were the period of tremendous change in the business environment because of the scope of global competition, explosive growth of internet and pace of innovation in products and services development (Garrison and Noreen, 2003). These had brought good things for the customer as intensified competition has generally led to lower price, higher quality products and more choices. In order to cope with

this changing environment, it is necessary to have competitive management control system in an organization which ultimately brings new practices of management accounting system.

Process orientation can also be referred as advance management accounting techniques. The process orientation trend can be explained from several perspectives. One is the contingency perspective (e.g. Lawrence & Lorsch, 1967). Increased global competition, demand for fast deliveries and customized products as well as rapidly changing market preferences are forcing companies to become more process oriented in order to survive (Nilsson, 1998).

### **2.1. Activity Based Costing**

A costing system is used in both service and manufacturing industries and in both public and private sectors, which identifies overhead costs as closely as possible with the drivers of cost, i.e. different activities that take place in an organization (Gowthorpe, 2008).

Activity based costing could work as influencer of strategic planning i.e. it might expose that product which gets assembled with many separate parts have higher production cost than the simple products, or products, produced in low volume have higher unit cost than the products produced in higher volume, or products with short life cycle have higher unit cost than the products with extended life cycle. ABC views the system as a whole considering the financial and non financial perspectives of data to help managers to have a realistic views of costs, product pricing, make or buy decisions, product mix decisions, adding or deleting products, elimination of non-value-added activities and emphasizing on better factory layouts and simplicity in product designs (M. Gupta, K. Galloway, 2003).

#### **2.1.1. Features of ABC**

- Nonmanufacturing as well as manufacturing costs usually assigned to products.
- Some manufacturing cost may be excluded from product costs.
- A number of overhead cost pools are used, each of which is allocated to products and other costing objects using its own unique measure of activity.
- The allocation bases often differ from those used in traditional costing systems.
- The overhead rates, or activity rates, may be based on the level of activity at capacity rather than on budgeted level of activity. (Garrison and Noreen, 2003)

#### **2.1.2. Steps for implementing Activity Based Costing**

- Identify and define activities and activity cost pools.
- Wherever possible, directly trace costs to activities and cost objects.
- Assign costs to activity cost pools.
- Calculate activity rates.
- Prepare management reports. (Garrison and Noreen, 2003)

### **2.2. Target Costing**

Target costing is a comprehensive cost planning, cost management and cost control concept used to influence or to have an impact on product cost structures primarily at the early stages of product design depending upon the requirements drawn from the market. The target costing process requires the cost-oriented co-ordination of all product related organizational functions (Horvath, 1993).

#### **2.2.1. Objectives of Target Costing**

According to Frank Robinson (1999), some general objectives of target costing management are common to all such companies. Working through the concept it is clear that they will be interested in:

- Improved in Supply Chain Management.
- Better Cost Planning.
- Greater Focus on Customer & Products.

#### **2.2.2. Steps for implementing Target Costing**

U. Ibusuki (2007), found that the process of determining and then implementing a product target cost is based on below mentioned ten steps Crow (1999).

1. Readjust the cultural values and attitudes;
2. Determine the target price according to market;
3. Calculate and establish the target-cost;
4. Balance target-cost with requirement;
5. Target based costing process is determine and establish a team base organization;
6. Generate ideas and analyze alternatives;
7. Create models of product costing to provide support in decision making;
8. Use tools to reduce costs;
9. Reduce indirect cost application;
10. Calculation of results and sustaining management focus.

Figure 1  
**Three Main Elements of the Target Costing Process**



Figure 1. Cooper, 1999

### 2.3. Balanced Scorecard

The origin of this technique; the balance score card can be traced back in 1950s, which was considered a part of value based management as a performance measurement framework by Drs. Kaplan and Norton. Its outgrowth into strategic planning and management system provide aids to identify and comprehend connections between strategic outcomes in the form of cause and effect relations. Further they argued that it is not only a measurement system but a management system that compels an organization to articulate its organizational strategies and decode them into actions. Organization should be able to look at its scorecard and reverse engineer it to see what the underlying strategy is.

Further, by adding non-financial performance measure to traditional financial measure, this technique is possessed with metrics that helps an organization to focus on answers of three crucial interrogations i.e.

1) *Customer point of view*: How do customers like to see an organization's product/service?

Development of metrics for this category must include satisfaction level of customers, market share and comparative prices.

2) *Organization point of focus*: what internal business processes are persistently meeting customers' expectations? And at what an organization must excel?

To answer this question, metrics for this category, must allow managers to get information on the performance of internal processes that are running the business, and do the products and offered services conform its customers' requirements. Those employees, who know the processes intimately, must carefully design metrics for this category.

3) *Organizational growth and learning*: how can an organization build value and continuously improve? Metrics to answer this question must include organization's ability to learn and revolutionize through the percentage sales of new products and degree to which it's on time delivery is improving.

Norton resists the idea of organizations to strategically plan backward. Such strategic plans consist of initiatives list and milestones are based on cost metrics and also on internal business measure-time.

Organizational strategy should be designed in way that illustrates how it intends to creates and maintains shareholders values, rather than managing initiatives (Loren Gary, 2002).

### **3. Analysis**

Regarding traditional and process oriented management accounting there are certain different things which differentiate between them. It could be seen that traditional management accounting is much more towards financial aspects along with the performance measurement, e.g. budgeting, standard costing and variance analysis, cost volume variance analysis and performance measurement through CFROI and EVA. But if we see the process or modern management accounting processes it emphasizes on financial as well as non financial management of processes using latest production and financial tools, e.g. balanced scorecard, JIT, TQM, business process reengineering, Activity Based Costing and Target costing. Also if we see in process oriented management accounting the organization has to be very much technically and financially strong, IT know how, good training and development system of human resources and efficient flow of materials and uninterruptable logistics and supply chains. In traditional management accounting the calculations of costs was much more on the whole product instead of every process or department involved in production activity and record keeping of inventory was very much redundant but with process oriented management accounting tools the accounting transactions really have been reduced, e.g. by using JIT concept.

#### **3.1. Traditional Costing vs. Activity Based Costing**

Assigning only manufacturing cost to products but not assigning selling, administrative and overall general expenditures and costs; handled as period expenses has been practiced in traditional cost accounting practices. Though, producing, selling, distributing, and repairing costs are considered to be the part of manufacturing costs. In activity based costing, all of the overhead costs including manufacturing and non-manufacturing that have realistically contributed in products are assigned.

On the other hand, in traditional management accounting, even those manufacturing costs are also assigned to products which do not contribute in production directly or indirectly. But in activity base costing, all those costs are assigned, if it is perceived that certain cost would be affected by product related decisions.

According to traditional management accounting, if budgeted overhead cost is divided by determined value of any budgeted activity including budgeted direct material cost or budgeted direct labor hours then it gives the predetermined overhead cost. This activity leads to assignment of those costs which are idle or unused and eventually establish shaky and unstable unit cost of products. As compared to activity base costing, only those costs must be assigned to product which contributes in production. This activity, gives more stable unit cost of products. A company's income statement consider these costs as period cost and exhibited as an expense of current period. In this way, cost of idle capacity could be identified which prevents it burying in cost of goods sold section.

Finally, it can be concluded that implementation of Activity base costing system, requires an organization to allot an ample part of resources and in continuation of this system, its costly to uphold it than traditional direct labor based costing system. So sometimes the benefits of increased accuracy may not outweigh these costs. In addition, as we know that the managers are use to with the traditional management accounting method and so it will be difficult for them to shift to new one. In most of the traditional costing user organization use this as the performance evaluation tool and so there is a possibility that inconsistent participation not only the line managers but also the accounting staffs. Furthermore, there are many chances that data extracted from ABC, may be misinterpreted, and leads to wrong decision making. Costs assigned to products are usually bared by the ultimate customer and so it is very important to make sure that the cost assigning to products are potentially relevant.

#### **3.2. Standard Costing vs. Target Costing**

As we have already discussed about target costing which focuses on cost of product to a pre decided value prior to manufacturing that organization will have to fix it up to that level, i.e. a target costing and if we talk about standard costing which was previously followed in traditional management accounting means the estimated cost or standard cost of product which may increase after manufacturing and organization has no

control after that to reduce it because it was estimated prior to manufacturing which is called standard costing and no more in use.

### **3.3. Traditional performance measurement vs. Balanced Scorecard**

Traditional performance measurements merely concentrate on financial issues like EVA and ROI. In recent times, value added activities does not necessarily occupies the tangible or fixed assets in an organization but also through innovative idea, customer-supplier relationships, key database information etc. Financial performance deals with nothing but past performance and events in the organization and it is also usual that detail financial review has no predictive power for the future. Financial statement in the organizations are prepared on separate financial units or department and then compile it for entire organizational representation, as in today's competitive business environment, this approach is not consistent. In addition, the management some time take cost reduction attempts to maintain short term financial performance and where the targets are long term value creating activities i.e. R&D, customer relationship management. So finally it could be said that, financial tools helps an organization to highlight any improvements in financial performance through increase customer satisfaction level or quality services and innovation. What is needed through Balance Score Card is balancing the accuracy and integrity of financial measures with the drivers of future financial performance of the organization.

## **4. Conclusion**

As management accounting moves into the 21<sup>st</sup> century, what happens in the last decade of millennium will be crucial. Management accounting has already undergone a period of trial and tribulations and will no doubt continue to do so. Alterations in many cases irreversible, have taken place whereas instances of resistances to change also continue to emerge, and with good reasons. What is essential for management accounting to continue its self inspection and to do so by heeding transformations external to the field. Certainly shifts in management philosophies will continue to occur, trends will come and go and new realizations will emerge as technological advances and other societal changes takes place.

After thorough study of management accounting aspects including traditional and modern/process management accounting it would be hard to say that which one is better. Both the aspects have its own features but the process oriented management accounting is very much moderated and associated with modern accounting techniques and production tools which are more useful.

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