

Performance Measurement: Quality, Cost, and Time Is New System: So Called Strategic Cost Management

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Abstract

The rise in global competition has induced organizations to adopt new approaches in management. These changes in manufacturing environments have shifted the emphasis on management reports and are creating information needs that cannot be fulfilled by traditional measurements and reports. Information reporting is now expected to focus more on influencing and supporting the long-term goals and strategies of firms. This paper discusses the impact of iron triangle and its implications in terms of information reporting, strategic cost analyses and control. We compare the traditional approach measurements and reporting with the changes that are taking place in organizations. Contemporary firms must compete simultaneously on three dimensions: quality, cost, and time. These three elements form a strategic triangle is “Iron Triangle”.

Keywords: quality, cost, and time and strategic cost management

1. Introduction

Manufacturing has dramatically changed during the last twenty years, improvements in time to market, efficiencies, high quality, cycle time, reduce costs, response to consumer needs, and focus on continual improvement. These changes in the environment have led accountants and managers to search in order to find ways and methods to help companies better understand and identify company processes, activities and costs. And in order to overcome some of the limitations of traditional cost accounting and to enhance its usefulness to strategic decision-making. Because traditional cost accounting systems supports cost and production, and provide an inadequate information of a company's manufacturing operations analysis, quality analysis, problem solving, lost sale, and encourage short term. The strategic management accounting system supports the drivers of quality and cost management. The principal purpose of this paper is to present a new performance measurement system based on relevant factors of quality, cost and time and its relate with management accounting.

The present study attempts to provide some clarification of the relationship between management accounting, strategy and performance measurment ; quality, cost, and time and strategic cost management by explicitly addressing the information content of management accounting. Our basic assertion is How does management accounting information help to manage cost, quality, and time? And how iron triangle help organization meet its strategic goals?

This paper attempts to contribute to the management accounting information literature and relates to strategy in several ways. First, this research provides robust evidence on how the management accounting relates to strategy. Second the present study provides evidence about performance measurement cost, quality, and time, meet its strategic goals, through a more integral explanation between management accounting and strategy.

The remainder of this paper is structured as follows. Section 2 reviews the changing competitive environment literatures. Section 3 describes performance management. Section 4 presents the management accounting practices., section 5 presents the strategic cost management literature, section 6 management accounting supports strategic goals, section 7 management accounting systemand relate it with cost, quality and time. Section 8 Managing all three parameters of cost, quality and time simultaneously, finally conclusions of this study.

We adopt the descriptive analytical approach in this study, where we tried to showing the most important ideas on the subject of management accounting, strategic cost management and Iron Triangle.

2. Changing competitive environment

2.1. Changing product life cycles

Intensive global competitive and technological innovation combined with increasingly discriminating and sophisticated customer demands have resulted in a dramatic decline in product life cycles. To be successful companies must now speed up the rate at which they introduce new products to the market. Being later to the market than the competitors can have a dramatic effect on product profitability. In many industries a large fraction of a product's life-cycle costs are determined by decisions made early in its life cycle. This has created a need for management accounting to place greater emphasis on providing information at the design stage because many of the costs are committed or locked in at this time. Therefore to compete successfully companies must be

able to manage their costs effectively at the design stage, have the capability to adapt to new, different and changing customer requirements and reduce the time to market of new and modified products (Drury 2001, P.11).

2.2. Customer Orientation

Firms are concentrating on the delivery of value to the customer with the objective of establishing a competitive advantage. Accountants and managers refer to a firm's value chain as the set of activities required to design, develop, produce, market, and deliver products and services to customers. As a result, a key question to be asked about any process or activity is whether it is important to the customer. The cost management system must track information relating to a wide variety of activities important to customers (e.g., product quality, environmental performance, new product development, and delivery performance). Customers now count the delivery of the product or service as part of the product. Companies must compete not only in technological and manufacturing terms but also in terms of the speed of delivery and response. (Hansen and. Mowen, 2006, P.8) In order to compete in today's competitive environment companies are more 'customer-driven' and make customer satisfaction an overriding priority are demanding ever-improving levels of service in cost, quality, reliability, delivery and choice of innovative new products. (Drury 2001 P.11). The intensity of competition influences how much attention the firm should pay to competitive offerings, because they help shape customer requirements (Cooper and Slagmulder P.15).

2.3. New Product Development

A high proportion of production costs are committed during the development and design stage of new products. The effects of product development decisions on other parts of the firm's value chain are now widely acknowledged. This recognition has produced a demand for more sophisticated cost management procedures relating to new product development—procedures such as target costing and activity-based management. Target costing encourages managers to assess the overall cost impact of product designs over the product's life cycle and simultaneously provides incentives to make design changes to reduce costs. Activity-based management identifies the activities produced at each stage of the development process and assesses their costs. Activity-based management is complimentary to target costing because it enables managers to identify the activities that do not add value and then eliminate them so that overall life cycle costs can be reduced. (Hansen and. Mowen, 2006, P.8)

2.4. Total Quality Management

Continuous improvement and elimination of waste are the two foundation principles that govern a state of manufacturing excellence. Manufacturing excellence is the key to survival in today's world-class competitive environment. Producing products and services that actually perform according to specifications and with little waste are the twin objectives of world-class firms. A philosophy of total quality management, in which managers strive to create an environment that will enable organizations to produce defect-free products and services, has replaced the acceptable quality attitudes of the past. (Hansen and Mowen, 2006, P.8).

2.5. Time as a competitive element

Time is a crucial element in all phases of the value chain. Firms can reduce time to market by redesigning products and processes, by eliminating waste, and by eliminating non-value-added activities. Firms can reduce the time spent on delivery of products or services, reworking a product, and unnecessary movements of materials and subassemblies. Decreasing non-value-added time appears to go hand-in-hand with increasing quality. With quality improvements, the need for rework decreases, and the time to produce a good product decreases. The overall objective is to increase customer responsiveness.

Time and product life cycles are related. The rate of technological innovation has increased for many industries, and the life of a particular product can be quite short. Managers must be able to respond quickly and decisively to changing market conditions. Information to allow them to accomplish this goal must be available. This correlation between cost and time is a part of the cost management system (Hansen and. Mowen, 2006, P.9).

2.6. Efficiency

While quality and time are important, improving these dimensions without corresponding improvements in financial performance may be futile, if not fatal. Improving efficiency is also a vital concern. Both financial and nonfinancial measures of efficiency are needed. Cost is a critical measure of efficiency. Trends in costs over time and measures of productivity changes can provide important measures of the efficacy of continuous improvement decisions. For these efficiency measures to be of value, costs must be properly defined, measured, and accurately assigned. (Hansen and. Mowen, 2006, P.9)

Production of output must be related to the inputs required, and the overall financial effect of productivity changes should be calculated. Activity-based costing and profit-linked productivity measurement

are responses to these demands. Activity-based costing is a relatively new approach to cost accounting that provides more accurate and meaningful cost assignments. By analyzing underlying activities and processes, eliminating those that do not add value, and enhancing those that do add value, dramatic increases in efficiency can be realized (Hansen and. Mowen, 2006, P.9).

2.7. Advances in the manufacturing environment

Manufacturing management approaches such as the theory of constraints and just in time have allowed firms to increase quality, reduce inventories, eliminate waste, and re-duce costs. Automated manufacturing has produced similar outcomes. The impact of improved manufacturing technology and practices on cost management is significant. Product costing systems, control systems, allocation, inventory management, cost structure, capital budgeting, variable costing, and many other accounting practices are being affected. (Hansen and Mowen, 2006, P.6-7).

Authors argue All these factors drive companies to review or redesign their management accounting system and adopt new strategic approaches in order to meet the new requirements of competitive environment, if they will be to survive in today environment. These new approaches allow to managers to make better resource allocation decisions by focusing the product line and accurately anticipating the effect of changes in the product mix on the profitability of manufacturing operations.

3. Performance measurement

Performance can be defined as the ability of an object to produce results in a dimension determined a priori, in relation to a target. Thus it is necessary to have, first, an object whose performance is to be considered; second, a dimension in which one is interested; and, third, a set target for the result. The presence of these three elements ensures that performance as defined above does exist. But the measurement of performance also requires a measure for the chosen dimension (Laitinen, P.66). In addition Performance management (PM) is the process of managing the execution of an organization's strategy. It is how plans are translated into results (Cokins, 2004, P.1). The traditional dimensions and measures used in managerial decision making to measure the performance of a company are financial. Many of the arguments in favour of non financial measures have originated from the critics of these financial measures. Horngren declared that non financial performance measures will acquire greater prominence in future management accounting practice (Laitinen, P.66).

Performance measures are recognized as an important element of all Management programs. Managers directing and guiding the efforts of an organization in order to realize the strategic goals. Key performance indicators provide information on the current state of organization. A key principle of performance management is to measure what you can manage. In order to maintain and improve organization performance each function in the organization must concentrate on the portion of the indicators that they influence. Performance measures quantitatively identify something essential about our products, services, and the processes that produce them. They are a tool to help managers understand, manage, and improve what the organizations do. PM is an activity that managers perform in order to reach predefined goals that are derived from the company's strategic objectives. PM extracts the right process information and provides goal information needed to evaluate performance (comparison) as well as goals (evaluation). "Right" process information means that the information should be relevant for the level of control (strategic, tactical, or operational) and the company's strategic objectives. PM is based on the firm's strategy. It aims to support the implementation and monitoring of strategic initiatives. The selection of performance measures and the setting of targets for these measures are seen as concrete formulations of the firm's strategic choices. Both financial and nonfinancial measures are needed to translate the strategy into specific objectives that provide guidelines for operational action for middle and lower management. The actual results achieved for the various measures reflect how well the firm succeeds in achieving these strategic choices (Lohman et al, 2004, P.269). PM yields a fundamental type of management information needed for controlling operations. It creates focus, triggers corrective action, is the basis for evaluating performance, and may help challenging and improving strategic choices. Both the management accounting literature and the operations literature focus on the connections between strategy and PM—the role of PM as translating strategy into concrete goals and monitoring the delivery of strategy—and between operations and PM—measures need to capture the relevant characteristics of the underlying operational processes (Lohman et al, 2004, P.271). According to the performance measurement literature, a performance measurement system should encourage actions that are congruent with organisational strategy (Hoque, 2003, P.556).

4. Management accounting practices for measuring costs and benefits

There are differing views concerning the role of management accounting in developing wider measures of performance. Shank state that management accounting play role in facilitate the development and implementation of strategic process (Shank, 1989, P.50). Other researcher argues that management accounting is well placed to provide information to develop performance measures. Proponents of this view see non-financial

measurement as simply an extension of the established role that management accounting has played in evaluating managerial and organizational performance (Abdel-Maksoud et al, P.266). Like the value of economic goods, the value of a management accounting system depends on its costs and benefits. For an organization, the benefit of its management accounting system rests on the system's ability to provide relevant information for decision making (Ratnatunga et al, P.282).

4.1 Product quality and profitability

In the last decade, many firms have realized that the only way to meet international competition and the resulting erosion of domestic market shares is to improve product design and quality. Many firms have launched ambitious programmes to improve quality and manufacturing flexibility, reduce set-up times, minimize machine breakdowns, and eliminate idle-time losses. Whether such improvements in quality have resulted in net benefits can only be measured adequately to a firm by way of improvement in profits if traditional static cost measurements are replaced by more aggressive long-term perspective (Sriram and Gupta, P.36).

Managers must collect and report information on such items as (a) the proportion of total production that was reworked because of defects, (b) the causes and remedial measures taken to reduce defects, (c) the progress in defect reduction, and (d) the relationships between decreases in defects and long term profit changes. Future capital budgeting and investment decisions should consider, in addition to the traditional financial measures, the manufacturing cost reductions and sales increases that accrued because of improvements in quality (Sriram and Gupta, P.36).

4.2 Timeliness of reporting

Obviously if information is to be useful, it should be available on a timely basis. If costs are reported long after they were incurred and then after aggregating the costs, the report will be almost useless for monitoring performance or controlling costs. To make reports useful, cost measurement efforts should parallel the cycle of the production process. (Sriram and Gupta, P.36).

4.3 Supplying efficiency information

If the goal of managers is obtaining information useful to improve efficiency, reports must concentrate on the ultimate goal of an efficient firm: delivering a quality product at an appropriate price. This would demand that reports provide information on cost reduction, quality improvement and increases in flexibility. This case clearly illustrates how traditional cost analysis, when supplemented by strategic cost analysis, can improve decision frames and lead to better managerial decisions under competitive conditions (Sriram and Gupta, P.36). The author argue that the organization today becomes more complexity and managing requires that managers be able to supplying information more detail about quality, cost and time in several areas simultaneously.

5. Strategic cost management

The strategic cost management literature suggests that traditional accounting systems do not support the drivers of quality and the evaluation of drivers of quality, and that management control systems should change to support TQM. Traditional accounting supports cost and production analysis well, but not quality analysis and problem solving. This is because quality is driven by non-financial factors such as product design, process design, rework, and on-time delivery. There is also the view that non-financial performance measures are better indicators of management effort and reflect the causal reasons for future financial performance. Therefore, non-financial measures must supplement financial measures in providing support for TQM. Goals and objectives for non-financial factors can be set and measures used to provide feedback and rewards. BSC with its emphasis of supplementing financial information with non-financial information then supports TQM (Hoque, 2003, PP.556-558).

Strategic cost management or strategic management accounting, is often traced back to Simmonds (1981), who defined it as “the provision and analysis of management accounting data about a business and its competitors, for use in developing and monitoring business strategy” It is distinguished by its focus on providing information relevant to evaluating a firm’s competitive position in an industry, with an emphasis on customers and competitors as externally located objects of management accounting analyses. However, some SMA researchers emphasise the interface between accounting and marketing (Roslender and Hart, 2003, PP.256-258). As such, there is no accepted consensus on a definition of SMA. Authors propose, and find empirical support for, SMA as comprising five categories: (1) costing techniques of attribute, life-cycle, quality, target and value-chain costing; (2) planning, control and performance measurement techniques of benchmarking and integrated performance measurement; (3) strategic decision-making techniques of strategic costing, strategic pricing and brand valuation; (4) competitor accounting techniques of competitor-focused cost, position and performance appraisal; and (5) customer accounting techniques of customer profitability analysis, lifetime customer profitability analysis and valuation of customers as assets (Cuganesan et al, 2012, PP.246-247).

6. Management accounting orientation toward the achieving strategic objectives

The decisions that should be made with the purpose of ensure effective resources allocation have need of a variety of information that only management accounting can make available to managers. Management accounting supports decision making in organisations by providing managers with relevant information and analysis on the performance, costs, and benefits of a certain operation. The manager needs to both financial, about costs and revenues, with relevant non financial information about productivity, quality, time and other success factors for an organization. This idea supported by (Ansari et al, 1997) they defined management accounting as a system of measuring and providing operational and financial information that guides managerial action, motivates behaviours, and supports and creates the cultural values necessary to achieve an organization's strategic objectives. In this context, this definition reflects the correlation of management accounting practices and organization strategy, i.e emphasize the necessity of extending the analysis to the strategic elements. Cost information is also used for planning and control. It should help managers decide what should be done, why it should be done, how it should be done, and how well it is being done. Thus, planned costs of design, development, testing, production, marketing, distribution, and servicing would be essential information. That is, cost information is a critical input for many managerial decisions.

In addition (Blocher et al, 2010, P.4-6) state that cost management information is provided for each of the four major management functions: (1) strategic management, (2) planning and decision making, (3) management and operational control, and (4) preparation of financial statements. The most important function is **strategic management**, which is the development and implementation of a sustainable competitive position in which the firm's competitive advantage provides continued success. A strategy is a set of goals and specific action plans that, if achieved, provide the desired competitive advantage. Strategic management involves identifying and implementing these goals and action plans. Next, management is responsible for **planning and decision making**, which involve budgeting and profit planning, cash flow management, and other decisions related to the firm's operations, such as deciding when to lease or buy a facility, when to repair or replace a piece of equipment, when to change a marketing plan, and when to begin development of a new product. The third area of responsibility, control, consists of two functions, operational control and management control. **Operational control** takes place when mid-level managers (e.g., site managers, product managers, regional managers) monitor the activities of operating-level managers and employees (e.g., production supervisors and various department heads). In contrast, **management control** is the evaluation of mid-level managers by upper-level managers (the controller or the CFO, the chief financial officer). In the fourth function, **preparation of financial statements**, management complies with the reporting requirements of relevant groups (such as the Financial Accounting Standards Board) and relevant federal government authorities (for example, the Internal Revenue Service and the Securities and Exchange Commission). The financial statement preparation role has recently received a renewed focus as countries throughout the world have adopted International Financial Reporting Standards (IFRS), and the United States is expected to adopt these standards by 2014. The financial statement information also serves the other three management functions, because this information is often an important part of planning and decision making, control, and strategic management.

1. Strategic Management. Cost management information is needed to make sound strategic decisions regarding choice of products, manufacturing methods, marketing techniques and channels, assessing customer profitability and other long-term issues.

2. Planning and Decision Making. Cost management information is needed to support recurring decisions regarding replacing equipment, managing cash flow, budgeting raw materials purchases, scheduling production, and pricing.

3. Management and Operational Control. Cost management information is needed to provide a fair and effective basis for identifying inefficient operations and to reward and motivate the most effective managers.

4. Preparation of Financial Statements. Cost management information is needed to provide accurate accounting for inventory and other assets, in compliance with reporting requirements, for the preparation of financial reports and for use in the three other management functions.

Changes in business have made cost management much more critical and dynamic than ever before. Managers must think competitively; doing so requires a strategy (Blocher et al, 2010, P.6). That is to say you should change the method of thinking and change the behavior of workers according to strategy. Strategic thinking involves anticipating changes; products, services, and operating processes are designed to accommodate expected changes in customer demands. Flexibility is important. The ability to make fast changes is critical as a result of the demand of the new management concepts of e-commerce, speed-to-market, and flexible manufacturing. Product life cycles—the time from the introduction of a new product to its removal from the market—is expected to become shorter and shorter (Blocher et al, 2010, P.6). Cost management information is used in a wide variety of ways. Whatever the business, a firm must know the cost of new products or services, the cost of making improvements in existing products or services, and the cost of finding a new way to produce the products or provide the services. Cost management information is used to determine prices, to change

product or service offerings to improve profitability, to update manufacturing facilities in a timely fashion, and to determine new marketing methods or distribution channels (Blocher et al, 2010, P.7). That is, the role of cost management is to support the firm's strategy by providing the information managers need to succeed in their product development and marketing efforts, such as the expected cost of adding a new product feature, the defect rate of a new part, or the reliability of a new manufacturing process. (Blocher et al, 2010, P.7). furthermore information technologies such as internet have fostered the growing strategic focus in cost management by reducing the time required for processing transactions and by expanding the individual manager's access to information within the firm, the industry, and the business environment around the world. (Blocher et al, 2010, PP.8-9). In addition cost management has shifted away from product costing and financial reporting. to developing cost and other information to support the management of the firm and the achievement of its strategic goals.

The new business process focuses instead on customer satisfaction. Producing value for the customer changes the orientation of managers from low-cost production of large quantities to quality, service, timeliness of delivery, and the ability to respond to the customer's desire for specific features. Today many of the critical success factors are customer oriented. Cost management practices are also changing; cost management reports now include specific measures of customer preferences and customer satisfaction. (Blocher et al, 2010, P.9). moreover without strategic information, the firm is likely to stray from its competitive course, to make strategically wrong manufacturing and marketing decisions: to choose the wrong products or the wrong customers.

To compete successfully, firms need accurate cost information, regardless of their competitive strategies. And this is even more likely to be true for cost leadership firms that rely on a high level of manufacturing efficiency and quality to succeed. Effective management of manufacturing costs requires timely and accurate cost information. Getting this timely and accurate information requires that the firm choose a cost system that is a good match for its competitive strategy. Because accurate costs are important, such firms are likely to use activity-based costing, which is more accurate than the volume-based method for overhead assignment. (Blocher et al, 2010, P.93).

To provide useful information, a costing system must keep up with the constantly changing environment. To be competitive, the firm needs accurate cost information—for product pricing, profitability analysis of individual products, profitability analysis of individual customers, evaluation of management performance, and refinement of strategic goals. (Blocher et al, 2010, P.93).

The field of management accounting has become more strategic, This development has been enhanced by the fact that many traditional management accounting systems, such as performance measurement systems and cost accounting systems, have been transformed into new applications that allow for the inclusion of strategically critical information that can also take a non-financial form (Otley,2001, P.244), that is, management accounting have started to take a more strategic role in organisations. Management accounting is used to gather the financial and nonfinancial information needed by internal users. Managers are concerned with fulfilling corporate goals, communicating and implementing strategy, and coordinating product design, production, and marketing while simultaneously operating distinct business segments. Management accounting information commonly addresses individual or divisional concerns rather than those of the firm as a whole (Kinney and Raiborn, 2011, P.3). Also managers are concerned with formulating strategy, and cost accountants are charged with providing management with the information necessary for assessing progress toward strategic achievement (Kinney and Raiborn, 2011, P.3).

Recently, accounting literature argues that strategic success is considered an outcome of management accounting design (Langfield-Smith, 1997). Several studies have analyzed the role of management accounting in strategic management, examining the attributes of AIS under different strategic priorities (Ittner and Larcker, 1997; It has also been analyzed the effect on performance of the interaction between certain types of strategies and different design of management accounting.

7. Why quality, cost and time becomes strategic cost management

Management accounting is a system of measuring and providing operational and financial information that guides managerial action, motivates behaviors, and supports and creates the cultural values necessary to achieve an organization's strategic objectives. Management-accounting systems report the results of operations using financial and non financial measures. The fundamental purpose of management accounting is to help an organization achieve its strategic objectives. Meeting these objectives satisfies the needs of its customers and other stakeholders (Ansari et al, P.4-6). Management accounting is not an end by itself. It is an important tool for achieving an organization's strategic goals (Ansari et al, P.8). From this definition in order to meet your objectives should relate strategy with management accounting system.

Porter (1980, 1985) stat that in order to compete effectively, a firm must derive its competitive advantage in one of two ways: product differentiation to provide customer satisfaction from factors such as

superior quality, product flexibility, delivery and product design; or low cost production, which allows the firm to compete by offering its products at a lower price than competitors. While Porter contended that a firm should choose between competing on either product differentiation or low price, firms may focus on a variety of combinations of product differentiation and low price strategies (Shank, 1989, P.55). These strategies require effective management accounting system, in order to provide relevant information about cost, quality and time.

Strategy is the way that a firm positions and distinguishes itself from its competitors. Positioning refers to the selection of target customers or markets. Distinctions are made on the three dimensions of quality, cost, and time. Different customers have different expectations about the features and performance reliability (quality) they want in a product, the price (cost) they are willing to pay, and when and how quickly they want the product or services delivered (time) (Ansari et al, P.6). In addition Management accounting performs a similar function for individuals in an organization. It provides operational and higher management with the information that helps them do their job and achieve the quality, cost, and time objectives of the organization (Ansari et al, P.7).

Quality is such an important strategic variable that management accounting can no longer ignore it. One-way or another, a strategically effective management reporting system must deal explicitly with the issue of quality (Hoque, 2003, P.555). Quality is the total experience of a customer with a product. It includes the physical characteristics of a product, such as its features, and the reliability of performance of these features. Quality also includes service features such as after sale support and service, and the performance level at which these services are performed by an organization (Ansari et al, P.7). In addition quality is what customer expects as a lasting experience (Basu, 2014, P.178). Other words Quality is defined to include the ability to design a product that meets customer requirements (quality of design) (Cooper and Slagmulder, 1997, P.32).

Management accounting supports the objective of improving quality by providing crucial information concerning quality-related activities and quality costs. Managers need to know which quality related activities add value and which ones do not. They also need to know what quality costs are and how they change over time (Hansen and Mowen, 2006, P.9). Others words, Management accounting information helps managers achieve quality goals by

measuring and reporting the resources used in preventing defects; the cost of reworking defective units; the cost of doing warranty repairs; lost sales from selling poor quality products; new investment needed for increasing product quality; and by determining whether the spending on quality is producing tangible financial benefits. (Ansari et al, P.9).

Cost includes the resources expended by producers and their support organizations such as suppliers and dealers. Production costs encompass the entire "value chain," that is, all parties from suppliers to after-sales service and disposers or recyclers that create value for customers. Cost also includes resources expended by customers. Customer's cost includes the cost of maintaining and disposing of a product (Ansari et al, P.7). Activity-based Management can be viewed as an information system that has the broad objectives of improving decision making by providing accurate cost information, and reducing costs by encouraging and supporting continuous improvement efforts (Albright and Lam, 2006, P.165). In addition Examples of information that helps managers attain the strategic objective of cost management include reporting resources consumed by the products produced during a period; measuring resources consumed by activities performed in a period, analyzing factors that drive or cause costs to be incurred, analyzing product profitability, analyzing suppliers' cost structures and comparing (benchmarking) their cost against competitors' costs (Ansari et al, P.9).

Time means that existing products must be available when a customer needs them. Time also means that a firm develops products with new features or innovative technologies rapidly and takes these products to the market quickly. It also encompasses the time it takes to complete a cycle of activities such as start to end of production (Ansari et al, P.7). The correlation between cost and time is a part of the cost management system (Hansen and Mowen, 2006, P.9). Management accounting helps attain the strategic objective of time by measuring and reporting lost sales and profits from late product introductions, costs of delayed deliveries from suppliers, sales from new versus old products, response time to ship customer orders, and unused capacity available for new product introductions (Ansari et al, P.9).

The three parameters are quality, cost and time (or Iron Triangle) usually define the operating performance of any process. Quality and time are relatively easy to measure since they are based on physical measurements (Kaplan and Norton, 2001, P.157).

The three elements of the strategic triangle are relevant to all organizations: business, government, and not-for-profit. These organizations face the same demand for low cost, high quality, and timely delivery of product or services (Ansari et al, P.7).

Cooper and Slagmulder suggest a three-dimensional space represented by price (cost), quality, and functionality to represent competitive strategy. They state that firms that compete in a confrontational environment must develop and integrate their total quality management, product development, and cost management systems. The objective of this integration is to create a strategy based on developing products with the right level of functionality and quality at the right price (Cooper and Slagmulder, 1997, P.14). They argued

that in competitive environments, firms must become experts at developing low-cost, high-quality products that have the functionality customers demand. They must develop integrated quality, functionality, and cost management systems that ensure that products are successful when launched. The objective of the cost management program is to instill in everyone in the firm a disciplined approach to cost reduction. The cost management program must not limit its scope to just the four walls of the factory or even the boundaries of the firm. It must spread across the entire supplier and customer chains. Effective cost management must start at the design stage of a product's life. Once a product is designed, most of its costs are committed. (Cooper and Slagmulder, 1997, PP. 19-20).

Triplet consists of the three dimensions that define a product, which are cost\ price, quality, and functionality (Cooper and Slagmulder, 1997, P.5). For many of these firms, survival depends on their ability to develop sophisticated cost management systems that create intense pressures to reduce costs over the entire life of the product and across the entire value chain. This increased importance of cost management is a central (Cooper and Slagmulder, 1997, PP.6-7).

It is only if firms understand the importance of cost management that they can manage the survival triplet correctly and succeed in using a confrontation strategy. Cost management plays an important role in the success of many Japanese firms (Cooper and Slagmulder, 1997, P. 49).

The new environment demands more relevant cost and performance information on the organization's activities, processes, products, services, competitors, suppliers and customers. This lead companies to using their enhanced cost systems to:

- Design products and services that both meet customers' expectations and can be produced and delivered at a profit;
- Signal where either continuous or discontinuous (reengineering) improvements in quality, efficiency, and speed are needed;
- Assist front-line employees in their learning and continuous improvement activities;
- Guide product mix and investment decisions;
- Choose among alternative suppliers;
- Negotiate about price, product features, quality, delivery, and service with customers; and
- Structure efficient and effective distribution and service processes to targeted market and customer segments (Kaplan and Cooper, 1998, PP.1-2).

8. Managing all three parameters simultaneously

It is not necessary or advisable to expend equal effort on all three dimensions of the survival triplet. One dimension typically dominates the other two. The key to success is to select the suitable rate of improvement for each of the three dimensions. For example, in a market where the customer is demanding increased functionality and is willing to pay for it, the most important dimension is functionality. In such a market, the firm that can increase the functionality of its products fastest (subject to price and quality constraints) will develop a competitive advantage. If, in contrast, the market is price driven, then the critical skill is cost reduction (Cooper and Slagmulder, 1997, P.38).

Historically it was common for organizations to take a one-dimensional approach to strategy. For example, some business firms chose to compete by being low cost producers. Others chose to differentiate their product through quality or service. Still others focused exclusively on the timely introduction of innovative products or technologies. Today most organizations face hard global competition. To keep customers satisfied and meet the demands of other resource providers, contemporary firms must compete simultaneously on three dimensions: quality, cost, and time (Ansari et al, P.6-7).

Researchers proposed the trade-off model to choose their plant's competitive priority, concentrating efforts on developing assets and practices that help achieve their goals. Plants should focus on one priority at a time, because other priorities require different operational structures and infrastructures for support (Kenneth. and Marianne, 2002, PP.10-11). But It is difficult for a company to try to compete by offering superior performance along all of these dimensions, since it will probably end up second best on each dimension to some other company that devotes more of its resources to developing that competitive advantage (Kenneth. and Marianne, 2002, P. 11).

Trade-off studies examine the need for plants to prioritize their strategic objectives and devote resources to improving those manufacturing capabilities. For example, researchers frequently claim that plants must make choices between achieving low costs or high flexibility. Low cost producers seek to reduce waste and improve productivity, often designing efficient line flow systems comprised of relatively fixed machinery and standardized operator tasks. In contrast, highly flexible plants may choose a job shop design, seeking rapid response to changing customer demands and product specifications. But other researchers found support for this claim, linking line flow and job shop manufacturing processes to cost and flexibility priorities, respectively. (Kenneth. and Marianne, 2002, P. 11).

Other Studies also suggest that priorities are positively correlated and that high-performing plants are more likely to compete on multiple dimensions (Kenneth. and Marianne, 2002, P. 11). The underlying logic was that a factory could not excel simultaneously on all competitive priorities. Consequently, management had to decide which priorities were critical to the firm's success, and then concentrate or focus the resources of the firm on those particular characteristics. Similarly, a low-cost priority was not seen to be compatible with either speed of delivery. High quality also was viewed as a trade-off to low cost. Other researcher state that Cost of products and services are lead indicators of an organization's ability to meet market prices or offer competitive bid prices. Therefore, organizations that manage quality and the quality/prices trade-off could also monitor costs and lead indicators of costs (Maher et al, 2010, P.294).

9. Conclusion

Performance measurement and management accounting are critical components in development and improving organizations. Measurement explains how management accounting and performance measurement can help in the implementation of strategy, that is, lead to development of organizations. Success comes from developing and implementing an effective Strategy aided by management accounting Methods. Using new methods to all be used to aid managers in dealing with the pressures of competitive, improve and understand of how to build better organizations and evaluate their performance. Understand the importance of the development of a coherent sustainability strategy, commitment of the senior management team, and the communication throughout the organization. Management accounting and performance measurement systems help executives better manage their resources simultaneously in order to get superior performance. Understanding of the critical interrelationships between management accounting and performance measurement will provide better guidance on how to make better investment decisions that explicitly include measures that are necessary to drive improved organizational performance. Defining and implementing a performance measurement system within the company is considered a critical activity for supporting decision making, motivating people, stimulating learning, improving coordination and communication. We must find better ways to determination of the most important drivers and measures of success. Performance measurement: quality, cost and time allowing managers to understand and analyse why some companies are superior to us and combines the achievement of financial and non-financial objectives. Traditional performance measurement systems based on shareholder value are inadequate for sustainability management. In other words, the PM is nowadays considered fundamental for achieving the company's objectives, that is to say existing. In order to plan and manage a successful project, the three parameters of time, cost and quality should be considered

The competitive pressures facing firms in today's environment have led to increasing reliance on quality-oriented, delivery time and reduce costs in order to continue exist and development. Many researcher noted that should to focus on strategic triangle quality, cost and time, that is improve quality and customer satisfaction, as a way of meeting the challenges facing today's global organizations and increasing market share. And should not be only based on reducing costs but on improving quality that meeting customer needs,

The challenge of improving a firm's manufacturing performance is particularly relevant for managerial accountants. Management accounting system is supposed to provide information useful for managers' planning, control, decision making, and continuous improvement. From the literature Management accounting has an overall objective of making sure that organizations make effective use of resources so that value is maximized for shareholders and customers and other interested shareholders. And as result realize strategic goal. And because what you measure you can likely control, and what you control you can improve. Organizations that can make relation between strategy objectives and performance measurement will be create value beside opportunity for competitive advantage. For many of these firms, survival depends on their ability to develop sophisticated cost management systems that create intense pressures to reduce costs over the entire life of the product and across the entire value chain. This increased importance of cost management and becomes a central. It is interest for firms to changing their management accounting systems in response to changes in the competitive environment, and to innovations in manufacturing practices and technologies, that is, pay attention to quality, cost and time.

A strategically based management accounting system reports a greater number of the costs and benefits of organizational activities. Having this information in a form designed to meet managerial needs allows managers to make informed assessments of the company's performance in the value chain, of its position of competitive advantage, and of its progress toward organizational goals. Thus, an organization's management accounting system should accumulate and report information related to organizational success in meeting or exceeding customer needs and expectations as well as quality-related goals and objectives of cost and time. Managers can analyze and interpret such information to plan and control current activities and to make decisions about current and long-term future.

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