



## INNOVATIONS IN COMPANIES' COST MANAGEMENT

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**Abstract:** *Powerful integrational relations require systemic perception and coordination of business processes of all involved organizations. Regardless of the specific commitments in terms of business strategy, the modern company is, inevitably, faced with the requirement of cost competitiveness. In modern conditions of great external and internal complexity, achieving and maintaining competitive advantages is not possible without adequate information system. Cost accounting generates cost and performance information with the goal of qualitatively meeting information needs of, above all, internal users. It represents the essential part of the company's accounting information system as a whole and it is often stressed as the key information core and a reliable information support for the company's management in performing their managerial activities. In this paper we discuss the role cost accounting has in offering adequate information support to managers at all managerial levels. We emphasize some of the new tools, techniques, concepts and approaches to costing and cost management.*

**Key words:** *management, strategy, process, cost accounting, cost management.*

### CONTEMPORARY CHALLENGES OF COST ACCOUNTING INFORMATION SYSTEM

Cost accounting (CA), which measures and reports financial and non-financial information related to the organisation's acquisition or consumption of resources (Horngren, et al., 2005), has an exceptionally important position within the entire accounting information system of an organization because it provides information to both management accounting and financial accounting as subsystems of the accounting information system. When its information is intended for the financial accounting (providing information for the purpose of reporting balance sheets and income statements of the company as a whole, which is its traditional task) it measures product costs in compliance with the strict legal and professional regulations; however, when its information is used for internal purposes it provides the basis for planning, control, and decision-making. It also provides valuable information support for the management in performing the systematic management control as well as in making various business and financial decisions. This means that its information support is expanding towards the creation of relevant information for internal reporting on a company's business activities – especially for short term periods and in smaller organizational segments.

Cost data for the purpose of internal reporting are meanwhile relatively free from the constraints of legal and professional regulations. Accounting data used for external reporting very often do not completely satisfy managers' needs for decision-making purposes. Attempts at slight modifications of financial accounting systems for managerial purposes rarely end happily – like eating soup with a fork: it is possible, but it is far from effective (Maher, 1997). Meeting various information needs of the management related to *making individual business and financial decisions* has been emphasized over the last few decades as the fundamental CA task – it assumes calculating costs and benefits of

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individual business alternatives. By using unroutine cost-benefit analyses, CA creates reports based on the concept of *relevant* information. The concept of relevant costs, in choosing among alternatives, assumes considering the expected future costs which differ in alternative actions. Relevant cost analysis generally emphasizes quantitative financial information, but in decision-making, managers must pay due attention to quantitative nonfinancial and qualitative information and must, occasionally, give greater significance to qualitative or nonfinancial quantitative information. Nonfinancial information concerns legal and ethical considerations and long-term effects of decisions on the company image, employees' morale and the environment, and is relevant to particular business decisions.

While designing accounting information systems one must not lose sight of the following (Maher,1997): decision-makers' needs must be met; different cost information is used for different purposes – what works for one purpose will not necessarily work for other purposes; cost information must meet the cost-benefit test – namely, cost information can always be improved, but before establishing a new system, one basic question should be asked: will the benefits outweigh the costs? It is of vital importance that accounting information systems should be flexibly designed. Due to the fact that they are relatively free from legal and professional constraints and are in function of the company management, they are, in accordance with the needs of internal users, able to generate a broad range of information. Being flexible, it will be able to adapt to changes occurring in the business environment as well as in the company itself and, accordingly, respond in a qualitative manner to numerous and various information requirements of the company management. Today, there are new requirements for changes and continuous improvement so that the management could have adequate information support in managing the company – particularly key strategic variables. Regardless of the concrete orientation regarding business strategy, the contemporary company inevitably faces the requirements of cost competition. Modern business environment inevitably requires CA restructuring and new approaches to costing and CM in order to improve cost information quality. It is necessary to provide adequate information support concerning the process of business strategy formulation and implementation, i.e. finding adequate directions leading to the strengthening of the competitive position on the increasingly turbulent market.

One of the *new key themes* in CA is turning our attention to the customer. *Customer in focus* is the key point of the organization's success. "To be customer-driven" lies at the heart of CM; among all aspects of business operations which the management must take care of, the customer is the most important because without him the organization loses its purpose. There is a permanent question in the way business operations are performed which puts the emphasis on customer satisfaction: how can value be added for the customer? The focus is on the most profitable customers and the ways to first attract them and then retain them. Today, companies first identify customer needs and demands, and then proceed with the product design and production. *Value chain and supply chain analysis* is also a key theme. By using VC and activity cost information companies can identify strategic advantages on the market. Supply chain (SC) assumes the idea of an "extended company" - the focus expands from company *production VC* to *purchase VC* on the one hand to *distribution VC* as the final part of the whole industrial VC on the other. CM emphasizes integration and coordination of these activities through all links - companies in the SC, as well as through each business function in the VC of individual companies. *Costs, quality, time and innovations* are key factors of business success. The management must continuously focus on these key strategic variables in relation to competition, which surpasses the frames of their company and draws their attention to changes in the external environment observed and assessed by their customers as well. It is of vital importance to manage them carefully and thus affect the level of customer satisfaction. Customers want more than just lower prices and costs – they want quality, responsibility, punctuality. The combination of *benchmarking and continuous improvement* is an ever-present theme in the new approach to management. By comparing with the best examples, the management finds ways of continuously improving their proper practice. Benchmarking and continuous improvement are often described as a "the race with no finish" because management and employees displeased with a particular performance level seek continuous improvement. When they adopt this philosophy, the organizations perceive that they are able to achieve performance levels which they previously considered unattainable (Maher,1997).

Thus, new environment brings new challenges and problems which inevitably impose the need for serious reconsideration of past business philosophy established in stable and predictable business settings. It is of great importance to adopt a wider external orientation with the constant focus on changeable and sophisticated customer demands. The company's existence on the market directly depends on the degree of fulfillment of customer expectations but also on the intensification and strengthening of cooperation with other organizations from the environment (customers, suppliers, distributors).

## NEW TRENDS IN COST MANAGEMENT

In the past few decades there has been an increasing number of discussions about CM and extending various limits. In that period, the most prominent trend has been *shift the focus* from determining product costs by using standard traditional cost models, towards providing support for strategic and operational decisions by using certain forms of activity analysis. While considering the development of CM, it is very important to link it to modern challenges to organizations. Therefore, suggestions go in the direction of separating it from traditional accounting and abandoning the long-standing linearity of measuring historical costs and static standards.

The turning point in the development of CA was the advent of *Activity Based Costing (ABC)* which emerged primarily as an expression of the need to provide much more accurate data about the output cost price compared to traditional methods. It focuses on activities as parts of the entire process in a company and their cause and effect relations with the resources used as well as with cost objects (products and services, market segments, customers) i.e. activity drivers. However, management can use it not only for the purpose of calculation, i.e. more accurate product costing and, therefore, more successful price and product and service range management, but also for providing financial and nonfinancial information on activities, and effective CM – as assistance to activity based management. *Activity Based Management (ABM)* focuses on managing activities with the aim of increasing the value which the customer receives and profit obtained by providing this value, which assumes driver analysis, activity analysis and performance evaluation. According to ABM approach to company management the attention of managers is directed towards company activities; ABM assumes a set of decisions and actions based on ABC concept information. The goal is to increase the value delivered to customers and to boost company profitability to a higher level. Strategic and operational ABM are singled out. *Strategic ABM* assumes directing the organization towards the most profitable use of resources. *Operational ABM* assumes decisions and actions with the goal of continuous improvement of business processes - it is directed towards the improvement of efficiency and reduction of resources necessary for performing respective activities (Cooper and Kaplan, 1999). ABC model determines where the greatest possibilities of cost reduction lie; but ABC information is not a current operating tool for the activities of improvement. This model offers the key direction for decision-making where to launch initiatives such as kaizen costing, pseudo-profit centers, TQM and reengineering. *Activity Based Budgeting (ABB)* extends the ABM idea to the planning cycle by using it to establish cost limits and control systems in organizations. Supported by activity analysis ABB uses benchmarking information to help the company to control costs and eliminate the increasing trend of exceeding the budget without improving the company's ability to create value for customers (McNair,2007). ABB is directed towards future resources, activities and outputs and is a valuable information support to the process of strategic decision-making.

One of the most important recent innovations is *Just-in-Time (JIT)* concept of purchase and production. This business philosophy emerged from the need of the management for a more efficient inventory management, i.e. reduction of investing in inventories and it assumes that materials flow and production process runs smoothly. JIT system application requires a highly efficient coordination of purchasing, production and marketing functions. Unless all production process components are reliable, this system loses its efficiency. As a result, significant changes in organizational (structural and procedural) company activities which occur with the introduction of JIT systems, affect the nature of CM accounting systems—traceability of costs changes, product costing accuracy rises, the need for allocation of service-center costs diminishes, cost behavior and relative importance of direct labor costs changes, job-order and process costing systems are affected, reliance on standards and variance

analysis as well as inventory tracking systems decrease. In sum, organizational changes concern both CA and operational control systems. In general, they simplify CM accounting systems and at the same time increase the accuracy of cost information obtained. Therefore, a simplified approach to manufacturing cost flow has been developed – *Backflush Costing (BFC)* method which significantly saves time and effort and reduces errors – in JIT settings, among other things, there are no departments, production cycle time is measured in minutes or hours, and products are dispatched immediately after the completion; so it looks absurd to track costs from position to position within a cell. BFC uses trigger points to determine when manufacturing costs are assigned to particular key accounts. There are several variants of this method depending on the number and location of trigger points. (Hansen and Mowen, 1997)

*Target Costing (TC)* is a tool (McNair,2007) which emphasizes the relation between the price and market share as a basis for disciplining an organization's spending during product and process design, development and engineering. Basically, it assumes cost reduction per product unit. It is a completely new approach: how much a product *is allowed to cost* (Seidenschwarc,1993). TC is built in the decision-making (planning) process concerning introduction of new and making radical changes to the existing products and processes. *Target Cost Management (TCM)*, as a tool for a comprehensive cost and profit management and as a concept of long-term strategic CM, focuses on the design stage. It initiates CM in the earliest stages of product development and is aimed at intensifying the cooperation with the suppliers and other organizations on the market. TC operates after a general model: target costs = target sales price – target profit. If the target cost is below the presently feasible cost, the management budgets cost reductions which direct real costs to target costs.

*Life Cycle Product Costing (LCPC)* is an extension (McNair,2007) to TC tools, which links all costs driven by a new product, from the conception of the idea for the product through to its removal from the production program and withdrawal from the market, i.e. 'from the cradle to the grave'. The products are analyzed in order to determine whether they will bring profit during their entire life cycle. *Life Cycle Product Cost Management (LCPCM)*, according to the integrated approach, consists of activities leading to product design, development, manufacturing, marketing, distribution, use, maintenance, service and removal, with the aim of maximizing life cycle profits. As a result, product costs are tracked and analyzed through all stages of its life cycle, which is radically shortened due to changeable customer demands and the increasingly ambitious competition regarding the technological product innovations. In contemporary settings it is of vital importance to launch a new product on the market and replace the existing product with the innovated one as soon as possible (regarding quality and functionality). LCPCM stresses cost reduction, not cost control.

*Value Chain Analysis (VCA)*, i.e. costing and CM through the value chain, is a concept representing the broadest approach to management. It assumes monitoring the relations among activities that create value with the aim of cost reduction, where the problems of tracking, measuring, analyzing and managing costs are extended outside the borders of a company. Beside internal value chains (VC), it extends to the area of supply chain, i.e. suppliers, on the input side, and distribution chain, i.e. customers – distributors and end users, on the output side, because the internal VC of a company is built in the broader value system which includes both supply VC and customer VC. That is to say that the leadership strategy in low costs and/or the differentiation strategy can lead to sustainable competitive advantage, but successful application of these strategies requires the managers to understand all the activities that contribute to their achievement. It is necessary to understand the industrial value chain as a whole, not only the part in which the company participates. Without an external focus there is no effective strategic CM. With the aim of successful implementation of the relevant strategies it is necessary to break the VC into strategically relevant activities of a company. VC is a necessary approach to understand these activities; understanding both the complex links and interrelations between activities performed inside the internal VC of a company (internal linkages), and those describing the linking of activities of a company with the activities of suppliers' VC and customers' VC (external linkages). Therefore, in order to describe and exploit these relations, it is necessary to identify company activities and choose the ones that can be used for creating and sustaining competitive advantage. The optimal choice assumes the knowledge of costs and value created by each of the activities, as well as relevant cost drivers.

We must also point out that one of the critical factors of the success of pursuing competitive strategies on the market is to provide a rounded up performance measuring system. One of the solutions is the so-called *Balanced Scorecard (BSC)* which provides a comprehensive framework linking strategic objectives of the company with a coherent set of performance measures.(Zimmerman,2000). BSC attempts to unite and balance traditional financial perspective (concerning the measuring of current and designing future financial results) with three more perspectives of vital importance for a successful pursuit of competitive strategies on the market – the perspectives of customers, business processes and innovations and learning. In the BSC approach to performance improvement the most critical processes for the success of a strategy are identified.

*Value Stream Accounting (VSA)* is characteristic of *lean manufacturing (LM)* which developed from Toyota production system based on the JIT model and is the complete opposite of traditional production. Many companies, aspiring to the “world class” position, follow LM whose objective is to improve efficiency and effectiveness in every area – including product design, interaction with the suppliers, factory operations, managing employees and customer relations. In order to keep this position, they must persist in “endless journey” which requires continuous innovations and improvement. “Lean” includes making the right product at the right place at the right time in the right quantity with minimum waste and sustaining flexibility. Thus, the key for successful LM lies in the achievement of production flexibility which includes physical organization of production plants and the application of automated technologies including CNC machines, CIM, *robotics*, CAD, CAM (Hall,2008). Companies inclining to LM often use the tool *value stream map (VSM)* to present their business process graphically in order to identify the wasteful aspects which should be eliminated. VSM identifies all actions needed to complete product processing (batches or individual products) together with the key information about each individual action. Information needs of a lean company cannot be adequately supported by traditional information provided through conventional accounting techniques. Therefore, many lean companies have adopted an alternative accounting model - ABC method, but many replace it with a simpler accounting model - so-called VSA. It tracks costs by the value stream instead of department or activity; the value streams cut across function lines and departments, i.e. horizontally, and thus links with traditional vertical reporting on structure and cost flows are broken. It is of fundamental importance for its implementation to define *product families* – namely, products are grouped into natural families which share common processes from placing an order to delivering of finished products to customers (Hall,2008). As for the information support to lean manufacturing and world class companies, three information systems are being considered, from MRP and MRP II to ERP.

## CONCLUSION

Constant and dramatic changes in contemporary competitive environment, as well as the need of integrating into European and world market flows, require the knowledge of a wide focus of cost and performance management of companies. New environment brings new challenges and problems which inevitably impose the need for serious reconsideration of past business philosophies of companies based on stable and foreseeable business conditions. Therefore, suggestions are heading towards the separation of cost accounting from traditional accounting, together with abandoning of the long sustained linearity of measuring historical costs and static standards. Only by integrating the internal and external aspects it is possible to provide quality information for strategic management of a modern company. In order that CM could secure an important position in the 21st century and reject the label ‘old wine in new bottles’, key instructions are listed for the most recent research and practice regarding new techniques for the 21st century, such as: resource consumption accounting; the relative cost of intellectual capital and the value it creates; waste measurement and analysis; non-linear cost functions; dynamic cost modeling and prediction. Each of these techniques adopts a broader view of costs, focusing more on the way resources affect one another in creating or destroying the company value than on measuring the status quo. CM follows the need to define, measure and help the organization to maximize its potential to create value.

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