

COST ACCOUNTING AND COMPANY MANAGEMENT IN A WORLD WITHOUT WALLS

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Abstract: The process of globalization is creating a world in which individual nation states are increasingly interdependent and interconnected. In the last couple of decades numerous and dramatic changes in business environment have contributed to a high level of complexity, turbulence and uncertainty in the environment in which contemporary companies accomplish their economic mission. The trends of globalization followed by the removal of national barriers inevitably result in sharp intensification of international competition. What is more, the consumers' demands are changing more and more frequently and becoming more sophisticated, which, along with intense introduction of new information and communication technologies, drastically shorten product life cycle.

As a response to numerous contemporary challenges, a broad range of new management approaches and philosophies is developing, such as: value chain analysis, setting up long-term relationships of close cooperation with key customers and suppliers, continuous improvement, broad empowerment of employees, new production management systems and many others. Despite the underlying notional differences, they all have the same universal motif – to master key factors for business success (cost, quality, time, innovations) and supply customers with superior value on the market. Powerful integrational relations require systemic perception and coordination of business processes of all involved organizations. Therefore, managers in contemporary companies face complex and numerous challenges of successful company management. Achieving and sustaining competitive advantage in a dynamic and thoroughly uncertain environment necessarily requires sophisticated professional knowledge and skills, as well as designing an adequate information system – quality support to larger and more complex information requirements of managers at all levels of management.

Quality decision-making requires having at one's disposal information relevant for solving a particular problem. Within business and financial decision-making cost accounting, as the essential part of a company's accounting information system as a whole, represents a reliable information support for the management. Therefore, it is necessary to continuously review its information offer, as well as to find new ways of generating quality information as a support for modern mechanisms of company management. Only a flexibly designed cost accounting information system can qualitatively respond to numerous and various information requirements – as such, it will be able to adapt to changes occurring in business environment as well as in the company itself.

In this paper we discuss the role of cost accounting as the information basis of company management in global settings.

Keywords: Globalization, management, strategy, process, cost management.

Introduction

The process of globalization is creating a world in which individual nation states are increasingly interdependent and interconnected. In the last couple of decades numerous and dramatic changes in business environment have contributed to a high level of complexity, turbulence and uncertainty in the environment in which contemporary companies accomplish their economic mission. The trends of globalization followed by the removal of national barriers inevitably result in sharp intensification of international competition. What is more, the consumers' demands are changing more and more frequently and becoming more sophisticated, which, along with intense introduction of new information and communication technologies, drastically shorten product life cycle.

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1. Cost Accounting Information Role

Cost accounting (CA), which measures and reports financial and non-financial information related to the organisation's acquisition or consumption of resources [6, p. 5], 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 it measures product costs in compliance with the strict legal and professional regulations. When its information is used for internal purposes it provides the basis for planning, control, and decision-making. 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. [11, p. 9]

The importance of CA as information basis for *external financial reporting* is particularly reflected in providing relevant data for the purpose of inventory balance and determining the cost of products sold. In compliance with the widely accepted regulations, it includes into the inventory value only the necessary costs of functional production fields – but not the costs of uneconomical spending, inefficient work and unused capacity, which represent period costs. CA 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. When internal reporting is in question, analytical and short-term aspect – notably the success accomplished – is emphasized. Therefore, apart from presenting the overall business results of the company as a whole, it is possible to segment it from various aspects – it is an extremely important management instrument for planning and control.

When activities of *planning and control* of the performance of the company and its narrower segments for various time intervals are in question, CA provides the management with relevant information, i.e. it represents the basis of the accounting planning and control. This is so because it assumes short-term and analytical aspect of costing, and compiling relevant reports as well, regarding the ever increasing need for planning and control of managers' performance. Therefore, internal reports created by CA are primarily used by management accounting for offering adequate information support to management for the purposes of planning and control of business activities, i.e. for the purposes of more qualitative and efficient operations and making various business decisions.

Over the last few decades meeting various information needs of the management related to *making individual business and financial decisions* has been emphasized as the fundamental CA task – it assumes calculating costs and benefits of individual business alternatives. By using unroutine cost-benefit analyses, CA creates reports based on the concept of *relevant* information. The concept of relevant costs (relevant revenues as well), 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. [6, pp. 303-305]

While designing accounting information systems one must not lose sight of the following: 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? [11, pp. 71-72.] 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 CA changes and continuous improvement so that the management could have adequate information support in managing the company – particularly key strategic variables.

2. Cost Accounting and the New Business Environment

Market globalization creates a new business environment. Company management faces numerous strategic challenges of the open economy. Global competitive environment assumes as the fundamental CA task the increasingly demanding stockholders – their demands regarding optimization of financial performances of the company are increasingly rigorous. Numerous studies reveal that companies emphasize creating long-term value for shareholders are likely to outperform those that focus on preserving shareholder value in the short term [6, p. 7]. Moreover, customers are more fastidious – they insist upon low costs/prices, quality, time and innovations. This imposes the need of redirecting from mass production of standard products and the strategy of the economy of scope to the strategy of the economy of scale of company activities.

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. Regardless of the concrete orientation regarding business strategy, the contemporary company inevitably faces the requirements of cost competition. Numerous and skilled competitors with new sophisticated approaches to cost management (CM) and cutting edge technological achievements force it to manage costs carefully and skillfully. 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. CA, as the key information core of accounting information systems, has the task to help managers make balanced decisions in the face of organisational changes and the opportunities offered by their environment, but also to monitor and evaluate strategic and operational progress.

It is constantly being emphasized that CA should provide information useful for the decision-making process and particularly the information support for CM analyses and projects. Modern business environment inevitably requires CA restructuring and new approaches to costing and CM in order to improve cost information quality. Numerous studies point at the weaknesses of traditional formal CA systems, particularly emphasizing the problems of distortion, i.e. distorted information and limitations in presenting cost drivers, amounts and cost profiles in an extended business operations system. In general, improved CA can reach more management objectives than traditional¹ CA. In the new circumstances, many information weaknesses are attributed to traditional approaches to costing and CM.² Many organizations have faced a new environment that inevitably affects cost accounting and cost management. There are several key themes³ that should be stressed in this paper.

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

¹ For more details see e.g. references 7 and 8.

² For more details on weaknesses see e.g. references: 9, pp. 379-381; 3, p. 355; 12, p. 19.

³ For more details see references: 6, pp. 14-17; 5, pp. 9-13; 11, pp. 10-19.

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. Value chain (VC) describes a set of interconnected activities which increase an organization's product or service value for the customer where each step in the process of development, production and distribution can add value to products or services. VC facilitates consideration of the possibilities of achieving and retaining competitive advantage through strategically relevant activities. 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" and presents a set of activities of many organizations directed towards linking producers and end users on the market. Thus, 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 i.e. 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. Low costs are a significant business goal but cost improvement does not necessarily have to be sufficient. Customers want more than just lower prices and costs – they want quality, responsibility, punctuality.⁴

The combination of **benchmarking and continuous improvement** is an ever-present theme in the new approach to management. Benchmarking is a systemic process of measuring and comparing one's own products, services and activities against the best performance levels (inside or outside of the company). 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 [11, p.15].

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). Quality exchange of

⁴ Quality is the key variable of the differentiation strategy as well as of the leadership strategy in low costs. Quality cost is a relatively new tool and it includes: prevention, detection, internal and external failure. For more details on nonfinancial measures see references: 2, pp. 136-139 and 10, notably chapters 4-6.

ideas and information, better interorganizational coordination and integration of vital business activities are necessary assumptions for more successful competitive positioning of the company on the market.

3. Modern Trends in Costing and Cost Management

By comparing traditional and contemporary CA and CM systems, it is possible, in a certain way, to systematize their basic characteristics, i.e. differences⁵. First of all, in assigning costs to cost objects, unlike traditional systems (emphasis on allocation and unit- or volume-based activity drivers), contemporary systems emphasize both unit and non-unit-based activity driver tracing. Furthermore, unlike traditional approach (characterized by narrow and strict product costing), in contemporary cost accounting systems costing tends to be flexible in order to provide a wide range of cost information for different managerial purposes. There are also differences from the aspect of control systems, because in the traditional approach the emphasis is on cost management while the emerging opinion, however, is that the key to successful control in the advanced manufacturing environment lies in the management of activities, not costs. The new control system requires detailed information on activities and focuses on accountability for activities rather than costs. Therefore, the contemporary approach emphasizes maximization of systemwide performance – activities cut across the functional and departmental lines, focus on the system and require a global, not individual, approach to control. In the new control system, financial as well as nonfinancial measures are of importance, unlike in the traditional system which uses only financial performance measures. Traditional cost accounting systems, characteristic of traditional manufacturing environment, assume that all costs can be classified as fixed and variable, with respect to changes in the *units* or *volume* of product produced. The units of product or other drivers closely linked with units produced, such as direct labor hours and machine hours, are the only drivers *assumed* to be important and are used for the assignment of production costs to products. Cost accounting systems that use only unit-based activity drivers for assigning costs to cost objects are traditional. Since unit-based activity drivers usually are not the only drivers which explain causal relationships, much of the activities of assigning costs to products must be classified as allocation – assigning costs based on *assumed* linkages or convenience. Therefore, it is being emphasized that traditional cost accounting systems primarily tend to use allocation.

In the past decades there has been an increasing number of discussions about CM and extending various limits. It is a dynamic process which assumes intensive efforts directed towards continuous improvement, i.e. improving the existing and inventing new tools and techniques, starting with early activity-based costing models and pursuing lately in the direction of strategic cost management (SCM). 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. Managers should anticipate rather than simply react to changes in cost structure and financial performances. We will now look at

⁵ For more details see reference 4, pp. 55-61.

some of the new/improved existing tools, techniques, concepts and approaches to costing and CM.

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. Operational activities and operational cost drivers (activity drivers) are the focus of ABC system. Although organizational (structural and procedural) activities define them, analysis of operational activities (e.g. materials handling) and operational drivers (e.g. number of moves) can be used for suggesting the choice of organizational activities and organizational drivers (strategic choices). **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. The main data information source for that is ABC. Using cost information about various activities helps managers to identify activities that do not add value to products but waste resources, and also urges them to redesign expensive production methods. Thus, 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 [2, pp. 277-287]. **Strategic ABM** assumes directing the organization towards the most profitable use of resources. Due to ABC information we can point out non-profit activities (they should be eliminated) as well as the most profitable ones (they should be intensified), and make decisions affecting product development and design, fixing sales prices, specifying the production and sales mix, and establishing and developing relations with key customers and suppliers. All this can be achieved due to skillful combining of the knowledge about cost behavior (i.e. their drivers) with the knowledge about customer behavior. **Operational ABM** assumes decisions and actions with the goal of continuous improvement of business processes; and for designing ABC systems, as its information support, several hundred activities may be necessary in order to obtain better insight into processes underlying production and customer service. Operational ABM is directed towards the improvement of efficiency and reduction of resources necessary for performing respective activities. The advantages of activity analysis come primarily from the activity cost classification according to the possibilities of cost improvements. This classification enables managers to get an insight into how many current operating costs occur during inefficient processes or processes of low efficiency. 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.⁶ **Activity Based Budgeting (ABB)** extends the ABM idea to the planning

⁶ It should be noted that kaizen, as one of the new segments of business philosophy and CM concepts, assumes a set of various methods and procedures which are used in the production stage with the aim of continuous cost reduction. We speak about slight, incremental improvements of the already adopted designs and technological processes where all the employees participate – particularly immediate executives who have the authority and

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. [12 p. 19] ABB is directed towards future resources, activities and outputs and is a valuable information support to the process of strategic decision-making. Due to the use of ABC approach in cost design, in many companies today, designers have at hand higher-quality information for the development of new products acceptable to customers with significant cost savings. ABB also offers information support for the process of choosing suppliers, because by using ABC approach in cost planning and costing the particular supplier is defined as the driver of all costs which occur in doing business with him. Furthermore, information support relates to the process of product range management as well. However, if strategic ABM is not efficient, it may generate wrong information on optimal product mix⁷ and the so-called death spiral which the company may enter. By combining the application of ABC concept, the theory of constraints and linear programming it is possible to make decisions about defining the optimal product mix. If the ABC system is well planned, ABM reveals the possibilities of the emergence of unused capacity, i.e. bottlenecks, in the process that defines the performance level of the entire process, which indicates a close connection between ABM and capacity management. [2, p. 286]. We should also mention the importance of ABB information support in the process of establishing customer relations management. In the conditions of fierce competition, it is of vital importance to know the customer profitability; due to the ABC approach in that analysis it is possible to provide reliable information about the costs driven by customers.

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. Therefore, many companies, in their attempts to realize JIT objectives, introduce a flexible production system i.e. computer-aided production system which enables the company to produce various products with minimum setup time. 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. JIT diminishes the value of ABC for tracing manufacturing costs to individual products⁸ because in JIT production

responsibility to indicate the possibilities of new savings and improvements (i.e. actual manufacturing cost reduction) with their ideas and suggestions and to participate directly in their realization. It is coherent with other new CM approaches and concepts. Two variants are singled out in practice.

⁷ See reference 2, pp. 282-286. ABC analysts call the graph of cumulative profitability “whale curve”- it offers the signal and discipline to companies to consider whether customers really appreciate the product versatility that they provide at the moment.

⁸ We should recall that ABC has a lot wider use than product costing.

systems the interest in tracking costs for the purpose of inventory valuation decreases since their levels are, at any point of time, generally insignificant. However, managers are still interested in product costs for the purposes of decision-making. Therefore, a simplified approach to manufacturing cost flow has been developed – **Backflush Costing (BFC)**. It is said to be a simplified 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. Therefore, total daily manufacturing costs are recorded every day in the cost of goods sold account. All manufacturing costs are recorded directly in that account, and by working backward (from the cost of goods sold) the accountants can use BFC to assign manufacturing costs to inventories, taking good care to trace accurate costs to the products sold and inventories at the end of a period. The costs are ‘flushed back’ through the production process to the points at which inventories remain. 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. [4, pp. 380-382]

Target Costing (TC) is a tool [12, p.14] 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 [13, p. 80]. The implementation of new methods of identifying, measuring and providing information about critical factors of business success ensures the development of products to suit customer demands, regarding the features and quality, as well as the price. As a concept of a much more comprehensive and aggressive CM information support, 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, while the product price the customers are ready to pay is determined analytically, combining quality, design, purchase time and after-sales service. After defining the product and its price, the target profit is formulated. Total target profit and its allocation per unit are deduced from the strategic profit plan. If the target cost (as the difference between the sales price needed to ensure a previously determined market share and the desired profit per unit) is below the presently feasible cost, the management budgets cost reductions which direct real costs to target costs. [4,p.371] ⁹ Bearing in mind the organizational aspect, a successful implementation of TC concept assumes the creation of an organizational team structure that should include experts from different functional areas of the company as well as from the organizations it cooperates with on the market.

⁹ In the production stage, with the kaizen costing which follows TC, the realization of TC concept objectives is made possible.

Life Cycle Product Costing (LCPC) is an extension [12, p.14] 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. Since 90% of the life cycle product costs are determined in its design process, i.e. in the stages of a new product development and construction, activity management during this stage of product existence is stressed. This should, by all means, affect the managerial decisions regarding investments and directing more resources towards activities in the early stages of product life cycle. However, the overall success depends on how well the managers in manufacturing companies understand the activities, cost drivers and interaction among activities. Although LCPCM is important for all manufacturing companies, it is particularly significant in short life cycle circumstances, when good planning is critical and the prices must be accurately determined in order to cover all life cycle costs and ensure a good profit [4, pp. 367-372].

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. In the context of strategic analysis, activities are classified into organizational (structural and procedural) and operational, while costs of these activities are determined by means of organizational and operational cost drivers. Understanding organizational cost drivers is crucial for strategic cost analysis. The factors in question are structural and procedural factors which determine

the long-term cost structure of an organization and play the fundamental role in any cost reduction strategy [4, pp. 355-360].

In the contemporary settings, a system of integrated performance measuring, i.e. linking nonfinancial measures with improved relevant information on activity costs within the VC, imposes itself as an imperative. By focusing on the entire industrial VC a broad frame is created, useful for a better understanding, tracking and managing costs. This requires new techniques, tools and models for cost measuring and control, with continuous comparing of cost performances of the main competitors on the market, as well as a subsystem of nonfinancial performance measures, to be included into cost accounting information systems. This is necessary in order to provide information support to heterogeneous information needs and to allow complete insight into the entire VC costs, their more accurate linking to activities, products, customers, distribution channels or narrower segments of a company, as the relevant objects whose profitability is being measured. It is recommended that a reliable accounting support for this integrated approach to CM should be found in a combined implementation of new and improved existing concepts, alongside with an adequate integrated software support. 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 [12, p.5].¹⁰ 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. They are stressed not only for their potential for cost reduction, but also for their ability to fulfill end users' expectations. When using BSC, managers usually realize that for the implementation of a new strategy it may be much more important to stand out in completely new processes than to create gradual cost improvements in the existing processes. [2, pp. 280-281]

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. 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

¹⁰BSC was developed by Kaplan and Norton in their book ref. 10.

processing (batches or individual products) together with the key information about each individual action (it can include total labor hours, overtime, cycle time for the task completion, error rate). Some commercial VSM tools produce, beside the current state map, a future state map, describing the process which is more lean – where waste is removed to the fullest extent. Since it is possible to identify, from the latter, the steps of the action of eliminating nonvalue-added activities within the process, it is also the basis for the lean implementations [3, p. 354].

Information needs of a lean company cannot be adequately supported by traditional information provided through conventional accounting techniques, because of inaccurate cost allocation, promotion of non-lean behavior, inaccessibility in real time, financial orientation. Therefore, many lean companies have adopted an alternative accounting model. Some of them see the solution in ABC method, but many replace it with a simpler accounting model, the so-called VSA. VSA 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 [13, p.17]. 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 [3, p. 358]. As for the information support to lean manufacturing and world class companies, three information systems are being considered, from MRP (Materials Requirements Planning), and MRP II (Manufacturing Resource Planning), to ERP (Enterprise Resource Planning). In the past few years a range of software of the so-called ERP systems has been developed. ERP integrates departments and functions throughout the company into one system of integrated applications with a unique common database. A lean manufacturing company will thus have ERP system capable of external communication with customers and suppliers through electronic data interchange (EDI).¹¹

Finally, considering that companies operate in an extremely dynamic world of interdependent and nonlinear events, we should emphasize that CM cannot stay focused on independent activities and simple linear cost models and their drivers. In order that CM could secure an important position in the 21st century and reject the label 'old wine in new bottles', it is said that it is necessary to withdraw completely from simple assumptions and traditional limitations and that the key of the CM future lies in understanding the dynamic relationships between various resources and the amount of value they can create for the company stakeholders. In that sense, key instructions are listed for the most recent research and practice regarding new techniques for the 21st century, such as [12, pp.16-20]: 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.

¹¹ The consideration of ERP systems inevitably assumes themes such as supply chain management and data warehouse. A software generation has been developed based on a global supply chain consisting of a range of coordinated application software, individual companies which communicate among themselves, but the following problems are the most common: customs, taxes, language and cultural differences, fast changes in exchange rates, currencies and political instability.

Conclusion

Powerful integrational relations require systemic perception and coordination of business processes of all involved organizations. Therefore, managers in contemporary companies face complex and numerous challenges of successful company management. Achieving and sustaining competitive advantage in a dynamic and thoroughly uncertain environment necessarily requires sophisticated professional knowledge and skills, as well as designing an adequate information system – quality support to larger and more complex information requirements of managers at all levels of management.

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. The analysis of considerable experience of developed countries should widen and deepen the knowledge and help us comprehend the priorities of further changes to accounting information systems of a company. It is necessary to recognize favorable settings for implementation of new approaches and concepts of corporate cost and performance 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. The extent to which CA is capable of helping the management in serving the abovementioned purposes fundamentally determines its significance, i.e. the usefulness of its information. It is of great importance that the accountants should know their job well and seek the ways to add value to their organizations. In many successful companies in the world the accountant is a member of multifunctional teams as a reliable associate.

When considering the development of cost management, it is very important to link it with modern challenges to organizations. 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. Practical application of some new solutions faces difficulties in developed countries as well, because of high investment and operational costs. It is particularly emphasized that, from the aspect of modern cost management, there is much left to be done in order to raise cost management to the highest level of the modern practices.

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