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TOMASZ WNUK-PEL

Barriers of Activity-Based Costing Implementation in Polish Companies



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To my parents
Wioleta Miodek

To my beloved wife, Renata
Tomasz Wnuk-Pel

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INTRODUCTION

Since it originated in the late 1980s, the concept of activity-based costing (ABC) has been quite popular among companies all over the world, mainly due to the fact that there has been a large number of publications and courses related to the concept. Additionally, the concept became incorporated into university curriculums. However, implementing ABC is not easy. The process of implementation is complex and requires a lot of resources. Despite the fact that the concept of ABC has been known and used by companies since the 1980s, it has not diffused widely and it is still perceived as an innovation. The differences in the diffusion of ABC among countries stem from the different stages of management accounting development, different sampling, and different times when the research was conducted.

The majority of studies carried out so far in Poland on the concept of ABC focused on determining the scope of ABC use, and they explained the problems and barriers related to the process of ABC implementation to a minor extent. Another issue that has not been investigated in more detail is the identification of factors influencing the use of ABC. The first studies which proved the existence of ABC in the practice of Polish companies were conducted in 2000 by Sobańska and Wnuk. Later studies revealed only a few cases of ABC's adoption. More in-depth research on the problem of ABC diffusion in Polish companies was carried out by Karmańska (2003), Januszewski and Gierusz (2004) and Wnuk-Pel (2006, 2009, 2011, 2014). All the previous studies showed that the number of companies using the ABC system, implementing it, or planning to implement it, was growing, yet there were cases when companies abandoned ABC.

In the light of the previously mentioned facts, filling the identified research gap, i.e., the analysis of the scope of ABC use and the barriers to its implementation, seems very important. This study mainly aims to determine the level of ABC diffusion and identify the barriers to adopting this system in Polish companies. The general objective of this study is met through accomplishing several specific objectives, in particular:

- the development of the concept of ABC and its diffusion around the world as a reference point for further detailed research on the functioning of ABC systems in Polish companies;

- the scope of ABC implementation in Polish companies at the beginning of the 21st century in the light of ABC diffusion in the world;
- the factors which facilitate ABC implementation in Polish companies;
- the ways that information from ABC is used in companies;
- the key reasons underlying the lack of interest in ABC implementation from the perspective of companies which abandoned implementation or never considered it;
- the key difficulties related to ABC implementation from the perspective of companies which are considering its adoption.

In order to achieve the main goal and also specific goals of the research, two research methods have been applied: a literature study and survey research.

1. In terms of the literature study, both Polish literature and foreign publications have been analyzed. Such extensive literature studies enabled the authors to formulate their own findings and compare the findings with other research carried out in Poland and other countries.

2. In order to achieve the main objective of this work, survey research among Polish companies was performed. A questionnaire survey was applied as the research tool. It consisted of two parts: questions related to the general characteristics of the surveyed companies and questions related to the issue of ABC. The questionnaire was completed by 167 companies, although only 143 correct questionnaires were qualified for further analysis. The questionnaire was performed between December 2014 and May 2015. The data for analysis was collected by means of anonymous questionnaires sent by e-mail to companies trading on the Warsaw Stock Exchange and NewConnect; the questionnaire was also uploaded onto the goldenline.pl website. However, the majority of questionnaires were directly obtained from students of postgraduate studies and Master of Business Administration (MBA) programs. The Statistical Package for Social Sciences (SPSS) was used to analyze the data. It needs to be stressed that the results of the study should be interpreted with caution due to the non-random sampling, thus, the results should not be generalized in terms of all companies in Poland. On the basis of the conducted surveys, the following specific hypotheses have been verified:

- ABC has little popularity in Polish companies;
- ABC implementation is influenced by such positive factors as: production type of company, company size, foreign capital share, the level of competition, the diversity of the manufactured products, and the share of indirect costs in total costs;
- companies use information from ABC to calculate product costs, to streamline budgeting, to perform profitability analysis, to carry out analysis of activity and process costs, to set prices, to evaluate performance, to design new products and reduce non-value adding activity costs;

- the reasons behind the lack of interest in ABC mainly include: satisfaction with the current system of cost accounting, staff resistance, high implementation and maintenance costs, difficulties with the model's construction, a lack of management board support, inadequate computer software, and uncertainty of the benefits resulting from ABC implementation;
- the difficulties related to ABC implementation anticipated by companies considering ABC implementation include: problems with the model's construction, high costs of implementation and maintenance, staff resistance, and insufficient IT resources.

3. Additionally, apart from the above research methods, a comparative analysis of the author's own research with similar research conducted both in Poland and around the world has been carried out.

The monograph consists of five chapters. The first chapter analyzes changes in management accounting at the turn of the centuries and factors which have contributed to those changes. Problems related to using traditional systems of cost accounting in modern companies in relation to those changes have also been presented, and it was also shown how these problems may be solved by means of ABC.

The second chapter presents the stages of ABC development, beginning with the first version of the system from the late 1980s, through all the transition concepts (the second and subsequent generations of ABC) and ending with time-driven activity-based costing (TD ABC) and resource consumption accounting (RCA), concepts that originated at the beginning of the 21st century.

The third chapter analyzes previous studies on the use of ABC in Poland and around the world. In particular, it pays attention to survey research which focused on the diffusion of ABC, factors affecting the decision about the implementation of ABC, and research on problems related to its implementation.

The fourth chapter presents the research methodology, i.e., the problem and the research objectives. The research hypotheses are presented, and the applied tools and research techniques are characterized. Moreover, this chapter presents the applied methods that ensure the credibility and reliability of the questionnaire research.

The fifth chapter presents the analysis of the obtained results and verifies the research hypotheses. On the basis of the responses to the questionnaire, the status of ABC in Polish companies has been determined. Additionally, familiarity with the ABC system, the areas of its application, factors conditioning its implementation, as well as opinions about possible future implementation of ABC in companies are presented in this chapter. The last area of analysis relates to the barriers and problems expected by companies which were planning ABC implementation, as well as companies which abandoned implementation after analyzing its usefulness, or companies which had never considered implementing ABC. The final section of the book contains key conclusions and limitations, as well as possible further directions of research.

CHAPTER 1

COST ACCOUNTING IN THE MANAGEMENT OF MODERN ORGANIZATIONS

1.1. Management accounting at the turn of the 20th and 21st centuries

At the turn of the 20th and 21st centuries, companies around the world underwent incredibly rapid changes. Companies from Asia, the US, and Europe, in response to greater access to information, technological development, and globalization of markets, implemented new management methods. To meet the pace of the changes, they took initiatives which enabled them to meet the needs of customers, modify organizational structures, and implement new technologies. Increasing competition resulted in providing diversified products of high quality, supplied to customers in an efficient way with high added value (Bromwich, Bhimani, 1994). The market at the turn of the century was characterized by uncertainty and constant radical changes. The survival of a company in such an environment depended on its ability to identify new perspectives and skills to adapt to the ever-increasing competition. In such conditions, companies implemented innovative production systems (total quality control – TQC, just in time – JIT, or computer integrated manufacturing – CIM), advanced technologies and new organizational and managerial techniques. Along with technological changes, the practice of managing a company also changed, with the changes including alterations in information systems of management accounting. Among the most important factors affecting the change in the scope and role of management accounting in this period, one can find (Burns, Scapens, 2000; Horngren *et al.*, 2005):

- global competition – increased competitiveness at the end of 20th century and in the early 21st century caused a greater interest of organizations in their market environment, competitors, and customers (in particular the problem of customer satisfaction);

- the development of information technology – access to information technology (widespread use of personal computers, the development of database technology, and integrated management support systems) affected the flow of information in organizations and the nature of their work (especially in areas other than operations, for example, in management accounting departments);

- organizational changes – orientation towards core competencies and outsourcing of other activities affected the process of business management (e.g., it triggered the transfer of some competences from functional departments in headquarters to operating departments).

All these changes, i.e., growing competition in the global market, rapid development of information technology, and organizational changes, had a significant impact on the change in the scope and importance of management accounting. On the one hand, they contributed to the implementation of innovative solutions, and on the other, they influenced the use of traditional methods of management accounting.

In the late 1980s and early 1990s, the drive to improve the efficiency of business management, both in theory and practice, became evident. This led to the development and diffusion of such methods as:

- ABC, activity-based management (ABM), which are studied in numerous works by Cooper and Kaplan (Cooper, 1987a, 1987b, 1988a, 1988b; Cooper, Kaplan, 1991; Kaplan, 1988);

- balanced scorecard (BSC), developed by Kaplan and Norton (1992);

- total quality management (TQM), see: Deming, 1986; Oakland, 1989;

- benchmarking (Bogan, English, 1994);

- life-cycle costing (LCC), which was developed in the 1960s in the US Department of Defense (Bromwich, Bhimani, 1994).

The turn of the 1980s and 1990s brought more than just the development and diffusion of ABC, BSC and LCC. In this period, one can see an increased interest of American and British companies in solutions of management accounting which were being used successfully in other countries, particularly in Japan. The increase of interest in management performed by Japanese companies (including methods of management accounting), was a result of unprecedented success of these corporations in global markets (higher productivity and innovativeness of these companies meant financial success). The managers of Japanese companies introduced a strategy of cost reduction of products during their entire life cycle by using such methods as LCC, target costing (TC), Kaizen, and TQM. Japanese methods became more and more known, and gradually implemented more and more outside Japan; this was due to the diffusion of theoretical knowledge about them and due to the global expansion of Japanese companies which used these methods around the world. At the turn of the 1980s and 1990s, the internationalization of knowledge on management accounting was evident. The phenomenon even intensified over the following years.

The evolution of management accounting that took place at the turn of the centuries led to some controversy as far as its scope, methods, tools, and concepts are concerned. The system which was mainly to provide data on costs changed into a system that shapes economic information and plays a part in the management process. This concerns in particular those aspects of management accounting which are oriented towards strategic objectives on the border of management accounting, strategic management and marketing. A term that attempts to establish a framework for the concept and methods of strategically-oriented management accounting is strategic management accounting. The term was first used by Simmonds, who defined strategic management accounting as “the provision and analysis of management accounting data about a business and its competitors, for use in developing and monitoring business strategy” (Simmonds, 1981, p. 26). The introduction of the strategic dimension to management accounting emphasized the importance of information about competitors, demand and the market. Simmonds argued that companies can use instruments that will be able to provide accurate information necessary for strategic decisions. In the literature one can find many definitions of strategic management accounting,¹ however, despite nearly thirty years since the introduction of this concept, there is no one generally accepted definition.

Strategic management accounting is often contrasted with operational management accounting, sometimes also called conventional management accounting. Operational management accounting is oriented to the past, individual decisions, individual reporting periods, as well as separate units. However, in contrast to operational management accounting, strategic management accounting is focused on the future, external relations, many periods, and strategic business segments (Sobańska, 2010, p. 95). Despite the fact that, in most companies, management accounting focuses on the implementation of operational tasks, the situation may change in the future. Management accounting can and should change so that it takes the strategic conditions of the company into account.

The direction of management accounting development in subsequent years will be increasingly affected by the external orientation of companies. Modern companies will cooperate more closely with suppliers and customers, they will form strategic alliances, and will outsource more often. Further development of information technology, particularly the Internet, will enable companies to launch new channels of distribution and communication in terms of relationships between suppliers, manufacturers and customers. The development of information technology will also affect the way certain functions are performed, e.g., human resources management, accounting and finance, and IT, introducing greater

¹ The analysis of 10 definitions of strategic management accounting by, inter alia, Simmonds, Bromwich and Shank, was carried out by Szychta (2007, pp. 167–168)