# Does Management Accounting Lose Relevance Again? Supply-Chain Perspective

Samar El Sayad

Assistant Professor Accounting, Prince Sultan University, Kingdom of Saudi Arabia/ Lecturer in Accounting, Faculty of Commerce, Tanta University, Egypt. E-mail: <u>selsayad@psu.edu.sa</u>

Abstracts: The purpose of this paper is to explore how supply chain has pose new challenges for management accounting regarding costing and performance measurement issues and whether management accounting contend with these challenges. The development of management accounting and how it regained its relevance will be discussed in general. Then, the new challenges rose as a result of the introduction to the notion of supply-chain in the areas of costing and performance measurement will be clarified. Although current management accounting practices are perceived by many researchers as useful in the context of supply chain, the new challenges rose by supply chain have now propelled the management accounting researchers to realise a "condition for possibility" for revisiting the "relevance lost" thesis and its post-relevance-lost era in which a number of management accounting innovations have been introduced. The major contribution of this paper is that it paves the way for researchers to commence in re-testing the ideas embodied in management accounting and its relevancy to supply-chain context.

Keywords: Management Accounting, Supply-Chain, Costing; Performance Measurement, Relevance.

# 1. INTRODUCTION

Over the years since its inception, the research area of supply chain has attracted researchers and academics from various areas including production management, marketing, information technology, project management, engineering, accounting, etc. Hundreds of articles have been published. This is no surprise as now supply chain is perceived as a common theme in today's highly competitive and uncertain environment which has the capability of giving organisations the inspiration to survive. This may be attributable to the ability of supply chain in helping organizations to meet the profound challenges they struggle with. Especially, the challenges for an organization is no longer restricted in performing its own operations effectively and efficiently, but, additionally, it must ensure that the suppliers' operations are being performed in an appropriate manner and, also, build strong relationships with its customers. Fostering and maintaining an effective supply chain can prove to be the most daunting task. However, since organizations will have more than superior performance, then the ultimate results are worth the hard work. Responding to the proponents of supply-chain who point to underlying benefits as well challenges, organizations are now trying to overhaul their practices to comply with supply-chain thinking. Management accounting is one of those practices.

# 2. THE DEVELOPMENT OF MANAGEMENT ACCOUNTING: RELEVANCE LOST AND REGAINED

Management accounting practices have emerged as the preeminent methodology in serving the needs of thousands of organizations who are in deep need of knowing what is necessary to successfully compete in today's business environment. In 1987, Johnson and Kaplan (1991) pointed out the inadequacy of management accounting systems in their acclaimed book "Relevance lost: The rise and fall of management accounting". Johnson and Kaplan (1991) attributed the crux of the problem to the undue over-emphasis on financially-oriented decision analysis and the failure of traditional management accounting systems in providing relevant information for process control, product costing, and performance evaluation which is necessary for companies to survive and prosper in this time of rapid technological change and fierce competition. Meanwhile the development of management accounting systems placed on the 'centre stage' of the research agenda. A remarkable innovation in management accounting (Cooper, 1988a, Cooper, 1988b, Cooper and Kaplan, 1988a, Cooper and Kaplan, 1988b, Kaplan, 1988, Cooper, 1989a, Cooper, 1989b), Balanced Scorecard (Kaplan and Norton, 1992a), Theory of Constraints (Goldratt, 1988, Goldratt, 1990), Goldratt, 1993), Value Chain Analysis (Porter, 1985, Shank, 1989, Shank and Govindarajan, 1993) which have become widely known, accepted and implemented in many companies.

However, the discussions about the relevance of management accounting systems have often encapsulated by the narrow notion of organizational boundaries within which management accounting has been rooted and functioned. Yet the discourse of globalization and the revolutionizing information and communication technologies have recently triggered a new wave of innovations and developments through colonizing the traditional bureaucratic organization to be a boundary-less, post-bureaucratic form (Mabey et al., 2000). Companies are no longer compete as independent and separate entities, but rather as supply chains (Lamber et al., 1998). Since its inception, supply chain is perceived as a common theme in today's highly competitive and uncertain environment which has the capability of giving organizations the inspiration to survive. The emergence of supply chain has led to a tremendous shift from inward-looking view to outward-looking view where all participants of the chain need to be functionally coordinated (Chan and Qi, 2003). Consequently, many companies have started to overhaul their practices to comply with supply chain. Management accounting is one of those practices that need to be overhauled. Management accounting practices are still restricted by organizational boundaries within which they functions. This traditional view of management accounting is no longer adequate for companies which seek to compete in today's volatile business environment. As companies move into supply chain thinking, management accounting is of little assistance in managing supply chain where the predominant mental construct is a linked set of resources and processes that begins with the sourcing of raw materials through the ultimate delivery of end products to final customers (Seal et al., 2004). So the question is: does management accounting lose its relevance again?

Since the introduction of supply chain notion, the relevance of management accounting issue has been raised again and became subject to extensive discussion and debate. Current management accounting techniques, such as activity-based costing (ABC) and balanced scorecard (BSC), have been perceived by many researchers as adequate for guiding the companies orchestrated by supply chain configurations toward achieving competitive advantage (Ramos, 2004). However, other researchers argue that supply chain necessitates the introduction of innovative management accounting techniques without abandoning the traditional techniques (Kulmala et al., 2002). In the following sections, we try to highlight some areas where current management accounting techniques seem no longer relevant.

### 2.1. Costing issues

By 1987, traditional cost systems were widely recognized to be unable to cope anymore with the changes in business environment (Kaplan, 1994). This leads to the introduction of activity-based costing (ABC) (Cooper, 1988a, Cooper, 1988b, Cooper and Kaplan, 1988a, Cooper and Kaplan, 1988b, Kaplan, 1988, Cooper, 1989b) and, then, its new variants time-driven activity-based costing (TDABC) (Kaplan and Anderson, 2004) and process-based costing (PBC) (Lawson, 1994) as superior methodologies for improving the accuracy of reported product cost. These methodologies replaced traditional cost allocation systems with a more realistic cost assignment scheme which closely mirror the costs flow through a company. These systems have been perceived by many researchers as adequate for providing a clear picture regarding the costs along the supply chain (Askarany et al., 2010), pointing to candidate processes for improvement purposes (Seal et al., 1999, Dekker, 2003, Schulze et al., 2012, Fayard et al., 2012), and measuring the activities and processes impact on cost effectiveness which can serve as a criterion for supplier selection (Schulze et al., 2012).

However, in practice, many companies along supply chains are still using volume-based cost systems as they are not ready to apply ABC systems as costs are still calculated based on volume. Even if some companies are applying ABC systems, the technical problem of how to apply them remains unsettled. This diversity of cost systems is a major constraint to cost sharing and the effective application of new accounting techniques such as open book accounting, the development of cost transparency as well as the difficulties which may be encountered as a result poorly managed systems and ineffective supply chain relationships (McIvor, 2001, Kulmala et al., 2002, Kajüter and Kulmala, 2005). So, establishing widely accepted cost accounting practices is more critical today than ever before (Kulmala et al., 2002).

#### 2.2. Performance Measurement

By 1992, there was a growing belief that financial measures are no longer effective for the modern business companies. This was the impetus for the introduction of balanced scorecard in 1992 (BSC) by Kaplan and Norton (Kaplan and Norton, 1992b) as a model that balances between financial and nonfinancial measures and can improve strategic focus and control, and linking operational control to company strategy. Since then many companies from a broad range of industries have tested the ideas embodied in this model. Also, BSC has been used by a wide spectrum of companies to measure supply chain performance (Cousins and Menguc, 2006).

However, current performance measurement systems, including BSC, have been widely acknowledged by many researchers still fall far short in achieving their intended roles in supply chain context (Harland, 1996, van Hoek, 1998, Gunasekaran et al., 2001, Chan and Qi, 2003, Cousins and Menguc, 2006, Aramyan et al., 2007, Anderson and Dekker, 2009. Chae, 2009. Banomyong and Supath, 2011). Some researchers (Banomyong and Supath, 2011) criticize current supply chain performance measurement smart because of the focus on costs as a dominant indictor, no clear distinction between strategic measures, tactical measures, and operational measures, and sacrifice holistic system thinking. Also, the design of the performance measurement system is always made by buyer for buyer rather than for the relationship, and the buyers impose the performance measurement system on suppliers (Harland, 1996). Another critical point that has been ignored in current performance measurement system is the conflicting interest of supply chain participants as each participant has his own objectives and beliefs (Aramyan et al., 2007). Also some companies prefer to use simple and few performance measures to be understandable by all employees at all levels. Unfortunately, there is still no agreement between researchers regarding the categories, types, and contents of performance measurement system that is relevant to assess supply chain success (Banomyong and Supath, 2011). So, what is needed is an agreed upon system that tracks supply chain performance from a wider variety of perspectives taking into account the supply chain members and their dynamic interests.

# 3. CONCLUSION

While supply chain produces benefits, profound challenges can also arise. Companies should contend with and try new ways to meet these challenges to keep moving in the intended direction. Some arguments suggest that management accounting has the capability of giving companies the inspiration to meet supply chain challenges. However, supply chain will in turn pose new challenges to management accounting that should be considered otherwise management accounting will fall far short of its anticipated roles. As a corollary of emancipating the notion that management accounting is concerned with inside the firm, we need to re-visit the old theme "relevance lost" and to test whether or not management accounting is still relevant to support supply-chain environment.

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