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Contingencies Impact On Strategic Cost Management Usage In Lithuanian Companies

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Abstract

Assurance of competitive advantage is based on decision making process of managers by using SCM information. SCM is a set of techniques implemented by corporate management to design value-creating information related to costs drivers in value chain, for making strategic decisions and constantly aligning them with strategy in a highly uncertain business environment. In this research contingency theory is applied. Author examined three contingency factors on the use of the instruments of SCM. Study aims to explain the extent to which Lithuania's companies use SCM instruments regarding three following contingencies. SCM usage is more frequent in companies that experience a high level of competition intensity. SCM usage is higher in companies using strategy. SCM usage does not depend on company's size. Obstacles to use SCM are: unspecified financial accounting attitude to strategic decision making, a lack of knowledge, overheads in production process and resources of IT.

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Keywords: Strategic cost management; Contingency theory; Competition intensity; Strategy; Company size.

Introduction

Nowadays the context of business is constantly changing. Entities are forced to seek effective methods to manage their competitive advantage, financial and non-financial performance and at the same time to increase the value for stakeholders. Competitive strategy oriented to external context, effective organizational structure and strategic cost management (SCM) information allows companies to strive to success. Assurance of competitive advantage is based on decision making process of managers by using SCM information. The first time concept of SCM was mentioned in 1989 by Shank in USA. It constitutes three fundamental conceptions of costs drivers, value chain and strategic

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positioning. Lithuanian economy is fast evolving between the European Union countries, however facing huge challenges of intensified competition, demanding companies to use information of strategic decisions. Therefore, they want to know whether their accounting system is consistent with the context and if it is ready to provide useful information. The present research aims to make generalizations about the usage of SCM techniques in Lithuania.

In this research contingency theory was applied with the Cartesian approach. We examined three contingency factors, such as the competition intensity, strategy and company size, on the use of instruments of SCM, such as Activity based costing and management, Target costing, Life cycle costing and Benchmarking.

The literature about SCM is extensively growing (Shank, 1989; Shank, Govindarajan, 1993; Cooper, Slagmulder, 1998; IMA, 2000; Hoque, 2003; I. El Kelety, 2006; Anderson, 2007; Wickramasinghe, Alawattage, 2007; Miculescu, Miculescu, 2014). SCM research explaining the factors that are expected to impact on the usage of different levels of SCM techniques is widespread (Haldma, Laats, 2002; Hoque, 2003; Chenhall, 2003; Chenhall, Chapman, 2006; El Kelety, 2006; Jankala, 2007; Pock, 2007; Hyvonen, 2008; Strumickas, 2011; Abugalia, 2011; Zsolt, 2012; Islam, Hui, 2012; Klovienė, 2013; Ojra, 2014; Ayadi, Affes, 2014).

However Lithuania's SCM literature suffers from a lack of research in this area. That is why, regarding that demand for this kind of research among Lithuanian companies is growing and knowing that there is not enough empirical research made on it, this research will focus on filling this gap of knowledge about the critical phenomena.

Research object: usage of strategic cost management techniques.

The aim of this study is to explain the extent to which Lithuanian companies use SCM instruments regarding three contingencies.

The present paper aims to answer the question: to what extent Lithuanian companies use the SCM practices.

Research methods: literature review their analysis and synthesis. Empirical data was obtained using questionnaire survey method, empirical data analysis was made using descriptive statistics and regression analysis.

1. Theoretical background

1.1. Concept of strategic cost management

Shank (1989) assumed that SCM might be defined as the managerial use of costs information explicitly directed at strategic management. Shank, Govindarajan (1993) mentioned that SCM combines important aspects of managing costs in value chain. Cooper, Slagmulder (1998) argued that SCM is the adoption of cost management methods in the way that they improve strategic position and costs of the company. Hoque (2003) argued that SCM provides costly information for strategic decisions. El Kelety (2006) concluded that SCM is a philosophy, an attitude and a set of techniques to contribute to shaping the future of the company. Anderson (2007) said that SCM is deliberate decision making, aimed at aligning the firm's costs structure with its strategy and optimizing the enactment of the strategy. Miculescu, Miculescu (2014) defined SCM as a bundle of techniques and activities used by management in planning and controlling short and long-term decisions, allowing to increase the value of products and to decrease costs. The analysis of various concepts disclosed different aspects of phenomena:

1. Goal of SCM. Fundamental aim of SCM is to create rational way to make strategic decisions which help to form, communicate, improve and control the strategy, ensuring competitive advantage (Shank, 1989; Anderson, 2007). *2. SCM tools*. SCM is a tool to design, understand, provide and use *information* incorporating cost in company's performance (Shank, 1989, Hoque, 2003). Information is needed for *making strategic decisions*, planning and controlling (El Kelety, 2006; Miculescu, Miculescu, 2014). *3. Structure of SCM*. It is assumed that SCM is a bundle of sophisticated instruments (Cooper, Slagmulder, 1998, El Kelety, 2006, Miculescu, Miculescu, 2014). The following techniques are focused on 1) value chain analysis; 2) management of cost drivers within the value chain (El Kelety, 2006; Anderson, 2007); and 3) cost structure alignment with the company's strategy (Anderson, 2007). *4. Factors making an impact on SCM usage*. There are no direct answers as to what makes an impact on SCM usage. Author suggests that SCM implementation depends on 1) internal demand of company's managers to have highly tailored information for strategic management; 2) the context within the company how it manages its competitive advantage.

Considering the various aspects of SCM concepts researcher defined it as follows: *SCM is a set of techniques implemented by corporate's management to design value-creating information related to costs drivers in value* *chain for making strategic decisions and constantly aligning them with strategy in a highly uncertain business environment.*

1.2. Strategic cost management techniques

It was decided to use the explanatory framework designed by El Kelety (2006). The framework consists of: 1) philosophy, 2) attitude and 3) set of instruments. SCM is a philosophy of improving cost and revenue. It is not only cost management but also revenue management, therefore it is seeking to improve productivity, maximize profit, and improve customer satisfaction (El Kelety, 2006). SCM represents a proactive attitude that all the costs of the product and services result from management decisions within the company and with customers and suppliers (El Kelety, 2006). SCM is a set of reliable techniques, serving the overall needs of the organization (El Kelety, 2006). He concluded that SCM techniques can be grouped by: ABC, ABM, target costing, life cycle costing and benchmarking.

2. A contingency theory approach on strategic cost management

This study follows a contingency theory with a Cartesian approach. Gerdin, Greve (2004) assumed that the focus of such approach should be as to how single contextual factors affect single structural attributes and how these context-structure pairs affect company's performance. Making contingency based research analysis the most used contingent factors were: 1) intensity of competition; 2) strategy; and 3) company size (*Table 1*).

Table 1. Selection of contingent factors

Authors\contingent factors	Intensity of competition	Business strategy	Organization structure	Technology	Size
T. Burns, G. M. Stalker (1961); J. Woodward (1965); P.	+				+
J. Fisher (1995)	+	+			+
K. A. Merchant (1998)	+	+	+	+	
R. H. Chenhall (2003)	+	+	+	+	+
Total	**4**	**3**	**2**	**2**	**3**

2.1. Intensity of competition

SCM is particularly appropriate in companies that operate in highly competitive markets (Khandwalla, 1977; Ojra, 2014). Hoque (2003) noted that greater competition creates a strong need to focus on cost and value chain. El. Kelety (2006) assumed that the maintenance or improvement of competitive position in terms of intensified competition requires more efforts and activities in the areas of market planning, R&D, quality. Greater competition makes a higher need for companies to find ways to differentiate their products or among competitors (Guilding, Cadez, 2008). Therefore as a company's environment becomes intense, SCM techniques are needed to facilitate improved strategic decision making. On the basis of these arguments, the following hypothesis is formulated:

Hypothesis 1. SCM usage is higher in companies experiencing high level of competition intensity.

2.2. Strategy

In accordance to Chandler (1962) strategy is the determination of the basic long-term goals and the objectives of an enterprise, and the adoption of courses of action and the allocation of resources for carrying out these goals. Porter (1980) proposed three forms of generic strategies: 1) lower cost strategy is the organization's ability to produce and market a comparable product at a lower price than its competitors. It focuses on low cost, high market share, standardized products, economies of scale and tight cost control (Hoque, 2003); 2) differentiation strategy is the organization's ability to produce and market unique and superior quality products. It focuses on product uniqueness, brings brand quality, emphasis on marketing and research and has superior after-sale service (Hoque, 2003); 3) focus strategy which concentrates on a defined buyer group, product line or geographic market and quick response. Langfield-Smith (1997) SCM which is tailored to support strategy can enhance competitive advantage and superior performance. Aydi, Affes (2014) stated that ABC can be useful for calculating more accurate costs to help managers to find activities where there may be cost reductions. This leads us to suggest the following hypothesis:

Hypothesis 2. SCM techniques are more widely adopted in companies, where its performance is based on company's strategy.

2.3. Company size

Libby, Waterhouse (1996) stated that the benefits from management accounting system increases with the size of the company. Aydi, Affes (2014) said that large companies adopt innovations more easily than smaller ones, because they have a capability of managing the risk, abundant available resources and a strong infrastructure. Ojra (2014) said larger organizations would generally have more sophisticated management accounting system. Nguyen, Brooks (1997) provide empirical evidence in respect of the adoption of ABC system that showed that the adoption rates are much higher for larger firms than smaller ones. Therefore it is hypothesized that:

Hypothesis 3. SCM usage is greater in larger companies than small.

3. The research methodology and empirical results

3.1. Sampling

The population of this research is defined as all Lithuanian manufacturing companies, except very small companies that have less than 50 employees. They were selected because they use a wide range of costing techniques. Data was obtained via a mailed questionnaire survey. This questionnaire consisted of three groups of questions. The first is about the presentation of the company. The second deals with the frequent use of SCM techniques by the company. The third one is related to the questions about contingency factors. The sample size constituted of 110 Lithuanian manufacturing companies, gathered from Mūsų Lietuva database. Twenty eight responses were received from 15 chief accountants, 9 financial managers and 4 chief executive officers. It consists of 25.5 % response rate of the companies sampled.

3.2. Variable measurement

SCM usage. Exploring the SCM usage the respondents were asked "*to what extent does your company use the SCM practices?"* Then five SCM practices were listed. Likert scale from 1 to 7 was provided to answer the question, where 1 meant not at all and 7 meant to a large extent. If the practices were not applicable by company, respondents were asked to write the reason why not and fill N. A. (not applicable). It was measured by Likert scale.

Intensity of competition. Khandwalla (1972) provided measurement framework for this construct. According to this framework respondents were asked to rate the intensity of competition for: selling and distribution, quality and variety of products and price, intensity of competition for market share and competition related to customer service. **Strategy**. This contingent factor is designed to capture the extent to which the selected companies are cost leaders and differentiators in their strategic orientation. Respondents were asked to place their company on a scale of 1 to 7, where 1 meant that the organization is a pure Cost leader and 7 which meant that the company is pure differentiator.

Guilding, Cadez (2008) provided framework of questions which were used in our questionnaire: stable or diverse products and services, constant or dynamic competition, ignore or respond to changes in markets needs and focus on efficiency or cost control or not. **Company size**. This construct was measured by total revenue earned by the company (Guilding, Cadez, 2008). Respondents were asked open ended questions about revenues.

3.3. Results

Descriptive statistics for the SCM usage rates are presented in Table 2. The practices are depicted in descending order of usage, with means ranging from 4.42 for ABC, to 2.65 for LCC. Results showed that three higher ranking practices above midpoint of the measurement scale is used in respondents' companies and the last two practices yielded means below the measure's midpoint is not widespread.

Table 2. Descriptive statistics for the SCM usage rates

Technique	Mean	S.D.	Theoretical range		Actual range		N. A. %
			Min.	**Max.**	**Min.**	**Max.**	
Activity based costing (ABC)	4.42	2.24	1	7	1	7	**61**
Activity based management (ABM)	4.31	2.24	1	7	1	7	**68**
Benchmarking (BMKING)	4.29	2.15	1	7	1	7	**32**
Target costing (TC)	2.82	1.91	1	7	1	7	**75**
Life cycle costing (LCC)	2.65	1.97	1	7	1	7	**89**

N=28

Table 3 shows the reasons why companies are still not using SCM techniques. Results showed that ABC is not used due to unspecified financial accounting role, a lack of knowledge about technique. Also companies do not know its overheads that can be related to production process and they do not have enough computer-based resources. ABM technique is not used because of unspecified financial accounting role, a lack of knowledge and computer-based resources. BMKING usage has been stopped for the unspecified financial accounting role. TCC and LCC all others reasons without financial accounting influence are suitable.

Table 3. Reasons why not used SCM techniques

Reasons/mean	ABC	ABM	BMKING	TC	LCC
Financial accounting attitude to strategic decision making	6.58	6.52	4.12	-	-
Lacking knowledge about technique essence	6.12	6.49	2.40	6.85	6.92
Lacking knowledge about overheads in production	5.21	-	-	4.89	4.95
Problems with computer based information system implementing SCM techniques	4.32	4.12	-	5.41	6.12
Lacking knowledge about benefit/cost tradeoff	3.25	3.88	-	6.84	6.88

The hypotheses were tested by separately fitting each of the five SCM usage rate variables to the following equation (multivariable regression) which includes:

$$Y = b_1 + b_2COMP + b_3STRA + b_4SIZE + e \quad (1)$$

Where: Y=SCM practice usage rate; COMP=intensity of competition; STRA=strategic orientation; SIZE=log of revenue; and e=error. Results of the examination of the influence of these independent factors on the five practices of SCM are summarized in Table 4.

Table 4. Results of regression analysis covering the SCM techniques usage rates

Variables	ABC		ABM		BMKING		TC		LCC		SCM (Total)
	Std. b	**Sig.**	**Std. b**	**Sig.**	**Std. b**	**Sig.**	**Std. b**	**Sig.**	**Std. b**	**Sig.**	
COMP	0.43	(0.00)	0.16	(0.00)	0.28	(0.00)	0.18	(0.02)	0.16	(0.04)	0.24(0.01)
STRA	0.04	(0.25)	0.03	(0.12)	0.03	(0.07)	0.03	(0.01)	-0.13	(0.02)	0.03(0.09)
SIZE	-0.17	(0.1)	-0.15	(0.2)	-0.21	(0.00)	-0.02	(0.21)	-0.1	(0.02)	-0.13(0.11)
Adjusted R^2	0.16		0.125		0.05		0.08		0.123		
F	6.86	0.00	3.89	(0.00)	8.12	(0.00)	1.23	(0.05)	2.42	(0.17)	4.50(0.12)

The results showed that intensified competition is a contingency that has a strong impact on the usage of SCM techniques, especially on ABC and BMKING usage. Company size has a significant negative influence on all techniques of SCM usage. STRA contingency had positive impact on all SMC techniques usage, except one – LCC.

Hypothesis H1 is supported, it means that SCM usage is higher in companies experiencing high levels of competition intensity. **Hypothesis H2** is supported and it means that SCM usage is higher in companies which use strategy oriented to market. **Hypothesis H3** is not supported, SCM usage does not depend on company' size.

Conclusions

SCM concept is getting more attention in strategic management accounting literature. Author defined this concept as follows: SCM is a set of techniques implemented by corporate's management to design value-creating information related to costs drivers in value chain for making strategic decisions and constantly aligning them with strategy in a highly uncertain business environment.

Three of the five SCM practices (ABC, ABM, BMKING) got means above the midpoint of the measurement scale where "not all-used to a large extent" definitions were used. The main reasons why companies are still not using SCM techniques highlights the following obstacles: hyperbolized role of financial accounting, a lack of knowledge of techniques essence, a lack of knowledge about overheads in the production process, computer-based resources, and benefit/cost scarcity.

Companies which use SCM techniques noted that their size do not impact SCM usage. Companies are using more SCM techniques because of focus on intensified competition and because they have a strategy.

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