

RELATIONSHIP BETWEEN KNOWLEDGE MANAGEMENT AND MARKET ORIENTATION IN SMES

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Abstract:

The paper presents relationships between market orientation (MO), knowledge management (KM) and growth and development of small and medium-sized enterprises (SMEs). Two basic questions are stated for this study: (1) what are the relationships between those two concepts, KM and MO, and growth of SMEs (direct or indirect), and (2) what is the direction of the relationship between KM and MO. To answer the questions, literature review was conducted. Knowledge management is defined as a process that helps enterprises to find, select, organize and transfer important information necessary for activities such as for example strategic planning and decision making. Also two main perspectives on market orientation, cultural and behavioural, underline the importance of collecting and processing information about market. Previous empirical researches confirm significant relationship between KM, MO and growth and development of enterprises. However, KM and MO are different in SMEs in comparison to large enterprises. The differences result from characteristics of SMEs such as for example: small size, informal organization structure and being close to market. Moreover, although there is correlation between KM and MO, previous studies do not indicate unequivocally the direction of the relationship between those two concepts.

Keywords: knowledge management, market orientation, SMEs.

1. INTRODUCTION

Knowledge is perceived as a strategic organizational asset (Bollinger & Smith, 2001). It is an essential factor in achieving firm success and knowledge management (KM) is “a way for managers to cope with the heightened complexity of an increasingly global marketplace” (Wang et al., 2009). Previous empirical research investigated the relationships between knowledge management and, for example, innovativeness (Darroch & McNaughton, 2003) and information technology (Wang et al., 2007). Many studies were focused on the effect of KM on growth and development of enterprises. Results of those studies, both quantitative and qualitative, suggest positive and significant relationship between knowledge management and measures of growth and development of enterprises (Zack et al., 2009).

A separate but complementary direction of empirical research concerns market orientation (MO) of enterprises. According to Hunt and Morgan (1995), a market orientation is “(1) the systematic gathering information on customers and competitors, both present and potential, (2) the systematic analysis of the information for the purpose of developing market knowledge, and (3) the systematic use of such knowledge to guide strategy recognition, understanding, creation, selection, implementation, and modification.” Empirical studies confirm that market orientation is positively related to growth and development of enterprises (e.g. Baker & Sinkula, 2009; Davis et al., 2010; Kara et al., 2005; Pelham, 2000).

The issue of factors related to growth and development of small and medium-sized enterprises (SMEs) is particularly important in conditions of global crisis. In comparison to large firms, SMEs are more vulnerable in times of crisis because, for example, they have a weaker financial structure and fewer financing options. Besides, they are individually less diversified in their economic activities and it is more difficult for them to downsize as they are already small (OECD, 2009).

The objective of this paper is investigation of the relationships between market orientation, knowledge management and growth and development of small and medium-sized enterprises. Those two concepts, market orientation and knowledge management, underline the importance of knowledge and are related to firm growth. However, two basic questions are stated for this study: (1) what are the relationships between those two concepts, KM and MO, and growth of SMEs (direct or indirect), and (2) what is the direction of the relationship between KM and MO.

2. KNOWLEDGE MANAGEMENT

Knowledge management is an elusive concept (Darroch & McNaughton, 2003) and many scholars make an attempt to clarify the essence of the concept (see Cavaleri, 2004; Malhotra, 2005). For example, Malhotra (2000) claims that knowledge management “includes various processes such as acquisition, creation, renewal, archival, dissemination and application (conversion of new knowledge into action or behavior modification) of knowledge.” Darroch & McNaughton (2003) suggest that knowledge management is “the process that creates or locates knowledge and manages the sharing, dissemination and use of knowledge within the organisation. When knowledge is used, learning takes place, which, in turn, improves the stock of knowledge available to the firm.”

Knowledge management is mainly investigated in large enterprises. On the contrary, relatively small attention is paid to knowledge management in SMEs (Hutchinson & Quintas,

2008). Focusing attention on large firms is partly resulted from the fact that the larger firm is the greater challenges concerning knowledge management are. Regarding the firm size, SMEs do not have such problems in communication and knowledge dissemination as it is in large firms. Therefore, formal KM processes are less likely to be found in SMEs (Hutchinson & Quintas, 2008). Moreover, formal approach to KM uses information systems which are costly and designed for larger organizations. Thus, financial constraints and different SMEs needs cause that formal KM might not be fully applied in SMEs.

Studies indicate that the majority of SMEs report a lack of knowledge management in their organizations (Hutchinson & Quintas, 2008). Nevertheless, some activities undertaken by SMEs are related with the knowledge management processes: creating, sharing and applying knowledge. Thus, in SMEs knowledge management is often unaware, without the use of the terminology of knowledge management and has an informal character. Informal knowledge management means that knowledge is managed by organizations, but without that processes being systematized within policies, programmes and structures that are governed by the concepts or language of knowledge management (Hutchinson & Quintas, 2008). These findings do not mean that knowledge management in SMEs is unaware only. In some SMEs knowledge management is both informal and formal. Nevertheless, Mirza and Ali (2011) found that the awareness of knowledge management is positively related to the sustainable growth of SMEs.

Comparing KM in firms of different size, it is found that (Daud & Yusoff, 2010; Wong & Aspinwall, 2004):

- SMEs are in a favorable position in acquiring knowledge about customers, because managers and employees of SMEs have usually direct and close contacts with customers,
- In SMEs knowledge is usually disseminated verbally. Creating a formal system for codifying and storing knowledge is perceived as unfeasible because employees are overloaded with daily tasks. Moreover, SMEs have limited recourses and skills to maintain a knowledge repository. Knowledge is mainly stored in heads of managers and employees rather than in management information and technical systems. On the other hand, SMEs have fewer knowledge resources that large firms and it is easier for them to organize and store this knowledge.
- In comparison to large firms, SMEs have a simpler organization structure which facilitates communication and direct contact between employees. It is conducive to building knowledge network and disseminating knowledge within organization.

3. MARKET ORIENTATION

The marketing concept assumes that the key to firm success is identifying customers' needs and satisfying them more effectively than competitors do. Market orientation is the implementation of the marketing concept and a market-oriented firm is one whose actions are consistent with the marketing concept (Kohli & Jaworski, 1990). Morgan and Strong (1997) define a market-oriented firm as a firm which: develops an appreciation that understanding present and potential customer needs is essential to providing superior customer value; encourages the systematic gathering and sharing of information concerning present and potential customers and competitors; and, instils the *sine qua non* of an integrated, organization-wide priority to respond to changing customer needs and competitor activities in order to avoid threats and exploit opportunities.

In literature there are two main perspectives of market orientation, cultural (Kohli & Jaworski, 1990) and behavioural (Narvera & Slatara, 1990). Narver and Slater (1990) define market orientation as the organization culture that “most effectively and efficiently creates the necessary behaviours for the creation of superior values for buyers and, thus, continuous superior performance for business”. In this perspective, market orientation consists of three components: customer orientation, competitor orientation and interfunctional coordination. Customer and competitor orientation include all the activities involved in acquiring customer and competitor information and disseminating it throughout the firm. Interfunctional coordination comprises the firm’s efforts to create superior value for customers. In turn, according to Kohli and Jaworski, market orientation in behavioural perspective includes three key activities: generation of market intelligence, dissemination of the intelligence across departments and organisation-wide responsiveness to it.

Comparative analyses indicate that those two perspectives are similar. Both perspective assume that market orientation might be developed in firms in varying degrees and highlight the importance of gathering and transferring knowledge of customers and competitors and interfunctional coordination. Differences concern assumptions. In behavioural perspective, gathering and transferring knowledge are the essence of market orientation. However in cultural perspective, gathering and transferring knowledge are rather a product of a market orientation (Mavondo et al., 2005).

The relationship between market orientation and firm performance is a matter of extensive research (see Cano et al., 2004). Empirical studies included: determinants of market orientation, the relationship between market orientation and firm growth, and moderators and mediators of this relationship (see Liao et al., 2011). Results of the studies show direct (Hult et al., 2004) or indirect, for example via innovation (Han et al., 1998) relationship between market orientation and measures of growth and development of large enterprises. The significance of this relationship was also confirmed in SMEs (table 1). Nevertheless, there are differences in market orientation between small and large firms (Verhees & Meulenberg, 2004).

Table 1: Studies on the MO and Growth/Development measures in SMEs

Study	Sample	Growth / Development Measures	MO and Growth / Development relationship
Apaydin (2011)	406 SMEs in Turkey	Return on investment, increases in sales, overall performance evaluation	The effect of responsive market orientation on firm performance is positive when the firm has high adaptability
Gaur, Vasudevan, Gaur (2011)	315 manufacturing SMEs in India	Manufacturing performance (four measures relating to cost, quality, delivery, and flexibility)	A positive effect of customer orientation and inter-functional coordination on manufacturing performance. The relationship between competitor orientation and manufacturing performance is insignificant.
Davis, Babakus, Englis, Pett (2010)	155 small and medium-sized service firms in the U. S.	Market share growth and sales growth over the past three years	Positive
Baker, Sinkula (2009)	88 SMEs in the U. S.	Change in sale revenue, change in profit, change in profit margins	Positive

Table 1: (continued)

Ledwith, O'Dwyer, Michale (2009)	106 manufacturing SMEs in Ireland	Sales growth, profitability, new product success, sales share new product, market share, return on investment, internal rate return	Competitor orientation has an indirect impact on organizational performance, via market and financial performance of new products
Armario, Ruiz, Armario (2008)	112 SMEs in Spain	Ratio of export sales to total sales, export sales growth, the percentage of net profits obtained in the firm's export sales, growth of export sales net profits, the success rate of new product/service in major foreign market	Positive relationship between MO and export performance
Li, Zhao, Tan, Liu (2008)	213 SMEs in China	Return on investment, profits, market shares (compared with competitors)	Positive
Low, Chapman, Sloan (2007)	73 manufacturing SMEs in Australia	Gross profit margin, inventory turnover, return on investment, New product success rate	Positive correlation between MO and gross profit margin
Demirbag, Koh, Tatoglu, Zaim (2006)	141 SMEs in Turkey	Eleven financial and non-financial measures (e.g. revenue growth over the last three years, net profits, return on assets).	No direct relationship, indirect positive relationship via TQM
Keskin (2006)	157 SMEs in Turkey	Market share, growth rate, business size, profitability, overall success	No direct relationship, indirect positive relationship via organizational learning and firm innovativeness
Kara, Spillan, DeShields (2005)	153 small service firms in the U. S.	Sales, revenue growth, market share, return on investment	Positive
Mavondo, Chimhanzi, Steward (2005)	220 medium-sized firms in Australia	Market share, sales growth, profitability	Positive indirect, via human resources practices
Salavou (2002)	61 food and beverage SMEs in Greece	Average return on assets from 1995-1997	Positive. Product innovation has a moderating effect on this relationship.
Pelham (2000)	235 manufacturing SMEs in the U. S.	Growth/share, profitability, marketing/sales effectiveness	Positive
Appiah-Adu, Singh (1998)	101 medium-sized manufacturing and service firms in the U. K.	the success rate of new product, sale growth, return on investment	Positive relationship between customer orientation and firm performance

In small firms there are lesser opportunities to hire marketing specialists and gather market intelligence. Market intelligence is mainly based on personal contacts (e.g. with customers and suppliers) and secondary data (e.g. from sector research, professional magazines). On the other hand, small firms usually operate close to customers on local or regional market and are able to use market intelligence more effectively. Moreover, small firms can respond quick and flexible to changes in market environment because there is low formalization in small firms, decision-making is nonbureaucratic and they are able to perceive even weak signals from environment owing to frequent and direct contacts with customers. On the other hand, their ability to respond is constrained by limited technical and financial resources (Verhees & Meulenber, 2004). Market orientation requires dissemination of market knowledge in the whole firm. This requirement does not seem to be particularly fundamental in small firms where manager/owner makes most decisions (Verhees & Meulenber, 2004). However, by

sharing market intelligence with employees, employees understand business objectives better and are more motivated. Previous studies show a positive relationship between market orientation and job satisfaction (Zhou et al., 2008) and organizational commitment of employees (Kohli & Jaworski, 1990).

4. KNOWLEDGE MANAGEMENT AND MARKET ORIENTATION

Literature review suggests correlation between knowledge management and market orientation. Some researchers claim that a market orientation is a sub-set of a knowledge-management orientation (Darroch & McNaughton, 2003). Accordingly, knowledge-management orientation is a broader concept than market orientation and includes, beside market intelligence, knowledge about non-market factors such as knowledge about financial issues and technology.

Empirical studies indicate a direct impact of knowledge management on market orientation, and an indirect, via market orientation, impact of knowledge management on firm growth (Wang et al., 2009). The opposite relationship was also reported. An organizational culture of being market-oriented is important driver of knowledge management, particularly knowledge acquisition and dissemination (Hu, 2010). Then, although there is no agreement when it comes to the direction of the relationship between knowledge management and market orientation, studies confirms that, at least in large firms, there is a significant and positive relationship between those concepts. The existence of this relationship has rational explanation.

Lack of appropriate mechanisms of knowledge management in firms hampers or even disables effective creation and dissemination of market knowledge and consequently appropriate reaction on this knowledge. On the contrary, successful knowledge management implemented in a firm creates conditions for processing, interpreting and using of knowledge about market trends and events. Thus integration of knowledge management and market orientation might be a key competency and improve the competitive position of a firm. In this way, two approaches to formulating strategy are combined: *inside out* and *outside in* (Wang et al., 2009). A firm estimates its knowledge resources (*inside out*, a resource-based view) and creates knowledge in relation to market needs and requirements (*outside in*).

5. CONCLUSIONS

To sum up, the aim of this paper is investigation of interrelationships between market orientation, knowledge management and growth of SMEs. A literature review leads to the following conclusions:

1. Knowledge management and market orientation are different in SMEs and large firms. The differences result from characteristics of SMEs such as for example: small size, informal organization structure and being close to market.
2. Studies on knowledge management are mainly focused on large organization where knowledge processes are more complex and formal than in SMEs.
3. Most of empirical studies confirm a direct or indirect positive relationship between market orientation and SMEs growth. The mediating factors in this relationship could be for example innovation and organizational learning (Keskin, 2006). Moreover, Raju et al. (2011) suggest four major environmental moderators of the market orientation–performance relationship in SMEs: market turbulence, technological change, competitive intensity and market growth.

4. Knowledge management and market orientation highlight the importance of knowledge in firms and are believed to be drivers of firms' growth. There is correlation between those two concepts but studies do not indicate unequivocally the direction of the relationship between them.

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