

MOTIVATIONAL DRIVERS OF CUSTOMER KNOWLEDGE UTILIZATION IN KEY ACCOUNT MANAGEMENT

Competitive paper

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Abstract

Several researchers argue that the ability of the firm to utilize customer-specific knowledge should be recognized as a potential source of competitive advantage (e.g., Campbell, 2003; García-Murillo and Annabi, 2002; Zahay, 2008). At the same time however, it has been found that, in general, firms tend to be better at acquiring customer knowledge than at utilizing it (e.g., Campbell, 2003). The utilization of customer-specific knowledge is especially important in the management of key account customers (e.g., Abratt and Kelly, 2002; Arnold et al., 2001; Birkinshaw et al., 2001; Nätti et al., 2006; Shi et al., 2005) because key account customers are powerful and expect coordinated and customized service from their suppliers (Homburg et al., 2002).

In this study customer knowledge utilization is understood as the supplier's ability to make use of its organization wide pool of customer knowledge generated about and from its specific individual key account customers. Although customer knowledge management (CKM) has become a topic of growing interest in the literature during the last ten years (e.g., Campbell, 2003; García-Murillo and Annabi, 2002; Gebert et al., 2003; Gibbert et al., 2002; Salomann et al., 2005), and the importance of customer knowledge utilization has been addressed also in the prior key account management (KAM) research (e.g. Nätti et al., 2006), there is still a lack of research focusing on the factors that promote the utilization of customer-specific knowledge.

Given this research gap, the aim of the present study is to examine how the three motivational factors, namely esprit de corps (willingness of employees to 'pull together'), top management involvement and customer-relationship-based rewards, affect to customer knowledge utilization in supplier firms. The findings are based on a survey-data gathered from 97 large industrial firms in Finland. Linear hierarchical regression analysis is used to analyze the data. The findings show that esprit de corps and customer relationship-based rewards have a positive impact on customer-related knowledge utilization. The findings also show that top management involvement has a moderating effect on the relationship between esprit de corps and customer-related knowledge utilization. By building on the prior research on intra-organizational KAM dimensions (e.g. Homburg et al., 2002) and determinants of effective KAM (Workman, et al., 2003), this study proposes customer knowledge utilization and customer relationship-based rewards as new variables to be considered as determinants of effective KAM.

Keywords: customer knowledge, key account management, rewarding

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ABSTRACT

Several researchers argue that the ability of the firm to utilize customer-specific knowledge should be recognized as a potential source of competitive advantage (e.g., Campbell, 2003; García-Murillo and Annabi, 2002; Zahay, 2008). At the same time however, it has been found that, in general, firms tend to be better at acquiring customer knowledge than at utilizing it (e.g., Campbell, 2003). The utilization of customer-specific knowledge is especially important in the management of key account customers (e.g., Abratt and Kelly, 2002; Arnold et al., 2001; Birkinshaw et al., 2001; Nätti et al., 2006; Shi et al., 2005) because key account customers are powerful and expect coordinated and customized service from their suppliers (Homburg et al., 2002).

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INTRODUCTION

In the rapidly changing and globalizing business environment of today it is more and more difficult to attain sustainable competitive advantage based on products and technologies.

Therefore, many firms look for the advantage by nurturing customer relationships and generating customer knowledge that is difficult for competitors to copy and imitate (e.g. Galbreath, 2002; Hooley et al., 2001). Scholars representing the emerging customer knowledge management (CKM) stream of research argue that access to knowledge residing in the mind of the customer, in particular, may be of great value for firms in their attempts to enhance customer relationships and to differentiate themselves from their competitors (García-Murillo and Annabi, 2002; Gibbert et al., 2002). However, at the same time it is acknowledged in the literature that customer knowledge is not easy to manage because there are multiple sources of acquisition, it goes out of date easily, and it may be context-bound (Davenport and Klahr, 1998). Moreover, much of it may be tacit in nature and reside in the minds of salespeople throughout the selling organisation (Day, 2000). This leads to several challenges such as how to recognize the most important knowledge, how to make sure that right people have access to the knowledge and how to make use of the knowledge proactively?

Proactive utilization of customer-specific knowledge is of special importance when the customer is large, strategically important key account customer because key accounts are powerful and extensive, and expect coordinated service and special treatment from their suppliers (Homburg et al., 2002). Key account relationships typically involve multiple contact points between the supplier and the account between different functions and hierarchical levels in organizations, and therefore even a single key account relationship may constitute a complex web (Birkinshaw et al., 2001; Brehmer and Rehme, 2008) –easily leading to the dispersion of customer knowledge inside the supplier firm. Such complexity in customer knowledge flows between organizations and inside the supplier organization may lead to multiple selling efforts and contradictory service offerings, for example, thus making activities at the customer frontline seem fragmented from the customer's viewpoint (e.g., Cespedes, 1992; Nätti and Ojasalo, 2008). Moreover, fragmented customer knowledge hampers the calculation of customer profitability organisation-wide, and thus, makes it difficult for the supplier firm to build an appropriate value proposition for the key account (Ryals and Holt, 2007).

Many companies have tried to solve their customer knowledge-related problems by spending millions on different IT solutions and CRM technologies designed to collect customer-related information from multiple sources and to analyse it. However, it has been discovered that approximately 55 per cent of CRM projects tend to fail (Rigby et al., 2002). According to Rigby et al. (2002) the reasons for unsatisfactory CRM success are related to organizational factors such as human resources, organizational structure and reward systems. It seems, therefore, that despite the new technologies, customer knowledge is not automatically acquired, disseminated or utilised within organisations because ultimately the way the company manages customer knowledge depends on the people in the organizations and their willingness to take part in the knowledge processes. As a result, many companies focus more on the knowledge acquisition than the processes through which knowledge is put to concrete use (Campbell, 2003).

Although several authors have acknowledged the importance of customer knowledge in the management of customer relationships (e.g., Campbell, 2003; García-Murillo and Annabi, 2002; Gibbert et al., 2002; Salomann et al., 2005), academic research is still emerging. The studies to date are mainly conceptual in nature, focusing on the knowledge flows between the buyer and the seller (see e.g., García-Murillo and Annabi, 2002; Salomann et al., 2005) or on the

conceptual similarities and differences between customer knowledge management and customer relationship management (e.g., Gebert et al., 2003; Gibbert et al., 2002; Rowley, 2004). In a similar vein, the importance of customer knowledge is often accentuated in the key account management literature (e.g., Abratt and Kelly, 2002; Arnold et al., 2001; McDonald et al., 2003; Nätti et al., 2006; Shi et al., 2005), but to date empirical contributions focusing on customer knowledge utilization in key account management context remain sparse. It appears therefore, that there remains a lack of understanding in the literature about the internal processes through which firms manage customer-specific knowledge for creating customer value and developing and enhancing customer relationships. To address these gaps in previous research, we aim at increasing knowledge on the organization level factors of customer knowledge utilization in key account management, concentrating on the determinants affecting the motivation of employees to utilize customer knowledge. While organization level factors, such as lack of top management involvement, lack of customer relationship oriented organization culture and misalignment between rewarding and customer-relationship oriented targets and strategies, are often proposed as reasons for unsatisfactory results with CRM initiatives and knowledge processing, to date research providing empirical evidence on these relationships remains sparse.

This research paper is organized as follows. First, key account management as a context of the study is introduced, after which the specific features of customer knowledge utilization in the context of key account management are clarified. The discussion then proceeds to the motivational drivers of customer knowledge utilization, explaining the rationale for the three research hypotheses. The following section explains the research design and presents the results of the study. The final section of the paper discusses the conclusions with managerial implications and directions for further research.

KEY ACCOUNT MANAGEMENT AS A RESEARCH CONTEXT

The origins of KAM can be traced back to US industrial markets in the 1960s when firms started to expand geographically, and at the same time expected coordinated service and channels from their suppliers (Gosselin and Bauwen, 2006). In response, previously territory-based sales organisations were forced to re-design and coordinate their sales processes in order to meet buyer demand for price reductions and improvements in quality and service (Brehmer and Rehme, 2008; Gosselin and Bauwen, 2006; Weilbaker and Weeks, 1997).

Since the introduction of the early forms of key account management, KAM has become one of the most significant sources of change in modern sales and marketing organisations (Homburg et al., 2000). The following driving forces behind the increasing rate of KAM implementation have been identified in the literature: rapid changes in the business environment, the refinement of processes, customers' tendency to centralise their purchasing processes and rationalise the supplier base, market consolidation and increasing customer power and competition (McDonald et al. 2003; Piercy and Lane 2006; Wengler et al., 2006). Moreover, the increasing rate of globalisation has affected supplier willingness to implement KAM programmes because globally operating customers tend to expect a presence and consistent service and terms of trade from their suppliers in all of their operations (Montgomery and Yip, 2000; Sheth and Sharma, 2008).

Hence, customer expectations and demand for coordinated service force supplier firms to extend KAM programmes across national borders (Sheth and Sharma, 2008; Yip and Madsen, 1996). However, although the driving force has traditionally had a reactive tone, meaning that suppliers need to find ways of serving their key accounts better than they serve other customers because of the customer power, some researchers (e.g., Brehmer and Rehme, 2008; Gosselin and Bauwen, 2006) argue that KAM can also be implemented for proactive reasons. For example, firms may be proactively driven by sales opportunities in the markets, or by the desire to develop more customer-centric organisation structures (Brehmer and Rehme, 2008; Gosselin and Bauwen, 2006) and to develop bonds with the major customers. Moreover, it has been claimed that key account programmes lower the uncertainty in key account relationships (Ivens and Pardo, 2008) and, as a consequence, increase the stability of the supplier's business.

Since the emergence of the concept, key account management has been studied from several different perspectives. In their review of previous research Homburg et al. (2002) categorise previous literature into three types based on the unit of analysis: studies examining the characteristics and abilities of individual key account managers (e.g., Boles and Barksdale, 1996; Georges and Eggert, 2003; Guenzi et al., 2009; Harvey et al., 2003; Millman, 1996; Wilson and Millman, 2003; Sengupta et al., 2000; Wotruba and Castleberry, 1993), studies examining the specific features of key account relationships (Millman and Wilson, 1995; McDonald et al., 1997), and studies focusing on the organisational-level aspects (Homburg et al., 2002; Kempeners and van der Hart, 1999; Wengler et al., 2006; Workman et al., 2003). However, also other perspectives can be identified in the literature. For example, some researchers, such as Arnett et al. (2005), Jones et al. (2005) and Helfert and Vith (1999), focus on team selling and the specific features of customer teams. Furthermore, a growing number of researchers have turned their attention to the special features of KAM in the global context (e.g., Birkinshaw et al., 2001; Harvey et al., 2003; Montgomery and Yip, 2000; Shi et al., 2004; Shi et al., 2005; Yip and Madsen, 1996; Wilson and Weilbaker, 2004). This discussion takes key account management to another level in recognising that the extensive geographical scope involved significantly increases the complexity (Arnold et al., 2001; Shi et al., 2005; Yip and Madsen, 1996), but at the same time provides major opportunities on the global level.

In this study customer knowledge utilization is examined from the view of single key account relationships. This means that the study is focused on examining utilization of key account-related knowledge for internal purposes (such as evaluation of key account-related strategy or sales process) or external action-oriented activities aimed at increasing the added value to the key account. Because knowledge utilization is examined from the view of individual, already existing key accounts, organization level activities such as identification of key accounts are delimited from the study. This key account-specific approach was regarded important because key accounts are major customers with customised needs and preferences. Due to the large size of key accounts, already one single customer has a major influence on the activities and selling processes of a supplier firm. For example, customer-specific teams may be needed for some key accounts but not all. On the other hand, top management may be more committed to the management of some key accounts than others.

CUSTOMER KNOWLEDGE UTILIZATION IN KEY ACCOUNT MANAGEMENT

Customer knowledge is understood in this study as an organisation-wide pool of customer-specific knowledge generated about and from a specific key account customer. This knowledge is generated when customer data is transformed to customer information, the information is further integrated across the organisation and new knowledge about and from the specific customer is assimilated into the prior customer-specific knowledge of the supplier firm. It thus refers to all the knowledge, both explicit and tacit, the supplier has about and from a specific key account customer.

As previously noted, key account relationships are important but yet very complex for supplier firms to manage. Key account relationships are strategic in nature and therefore the knowledge flows between the supplier and the key account are typically much more extensive than in non-key account relationships (e.g., Birkinshaw et al., 2001; McDonald et al., 2003, p. 246; Nätti, 2005). The number of actors is also higher (Cannon and Narayandas, 2000; Ivens and Pardo, 2008), and an increasing number of key account relationships in large industrial firms extend beyond geographical borders (Sheth and Sharma, 2008). In addition there are high costs and risks involved (Ryals and Humphries, 2007). Confronted with such a paradox firms need to have organisation-wide processes for managing customer-specific knowledge in order to succeed in the increasingly competitive environment. Salespeople need to know the strengths, weaknesses, opportunities, threats and strategies of their customers in order to be able to identify new value-creation opportunities (Weitz and Bradford, 1999) and continuously to renew existing knowledge bases in order to gain competitive advantage in the rapidly changing business environment (Harvey et al., 2003). There is thus a need for systematic processes for managing customer knowledge in order to 'orchestrate' the relationship across all multiple contact points between the supplier and the key account. Customer knowledge should be coordinated organization-wide (e.g., Campbell, 2003; Payne, 2006) and thus, disseminated across the functional, hierarchical and geographical borders. Organisation-wide customer-specific knowledge would facilitate consistency in terms of offerings and providing seamless service, and would also make it easier to calculate and predict customer-specific sales and profitability (Ryals and Holt, 2007).

Customer knowledge utilization could be considered as the driving force of key account management in that it lays the foundation for all strategic decision-making concerning the key account relationship. Customer knowledge needs to be continuously utilized in order to be able to deliver added value and 'something extra' to the key account. Customer knowledge can be utilized firstly to enhance the existing customer knowledge base in the organization. Such knowledge-enhancing use (see Menon and Varadarajan, 1992) refers to constructing customer profiles, identifying new opportunities for value creation and developing customer-specific strategies and forecasts. Action-oriented utilization of knowledge on the other hand refers to activities that result in more concrete actions to the customer's direction, such as changes in products and services offered to the customer. Given the high volumes typical in key account relationships and the dependency of suppliers on their key accounts (Ivens and Pardo, 2008), suppliers cannot afford to lose them. On the contrary, they need to learn to know them better and proactively to aim at identifying new opportunities for customer value creation, thereby enhancing the relationship further. This requires a thorough understanding of the key account's business, and active utilization of key account-related knowledge (Abratt and Kelly, 2002).

The processing of customer-specific knowledge organization-wide and making use of the customer knowledge existing in different parts of the supplier organization requires commitment from the whole supplier organization in different functions and different hierarchical levels. By building on the previous literature (e.g. Campbell, 2003; Day, 2003; Reinartz et al., 2004) we identify three organization level motivational drivers that may facilitate customer knowledge utilization in supplier organizations, namely: customer relationship-oriented rewarding, esprit de corps and top management involvement. Customer relationship-oriented rewarding is a concrete incentive increasing the motivation to utilize customer-specific knowledge to build long-term customer satisfaction. While employee esprit de corps reflects the existing values among employees and ideally increases the openness to share and utilize information internally, top management involvement shapes the values of the organization. These determinants are each discussed in the following chapters.

Customer relationship based rewarding

A lack of alignment between rewarding and customer relationship-based strategies is often addressed as a major reason for unsatisfactory results in terms of CRM investments (e.g. Reinartz et al., 2004). This means that many times the rewarding schemes for sales personnel are product-based and emphasize annual sales budgets without making a difference between different customers. Thus, the rewards do not support attainment of customer-specific targets such as customer satisfaction and retention (Day, 2003). Because at the end individual employees are the building blocks of customer relationships (Ryals and Knox, 2001), the incentives should reward customer orientation of employees and activities that put customer relationships orientation into practise. According to our view customer knowledge utilization can be regarded as such practise.

The role of using incentives and rewards in order to ensure that sales personnel will actually utilize the customer knowledge, has been discussed to some extent in the literature. Rogers et al., (2008) suggest that while successful implementation of CRM systems is most likely associated with performance pay for operational managers, senior managers should also consider how to reward successful use of the new systems among employees. According to Yim et al., (2004), reward systems are instrumental in shaping the behaviours of all employees and they can enhance the motivation to adopt new attitudes and behaviours that are consistent with a CRM orientation. They argued that the rewarding should be modified into tangible goals and rewards for retention of key customers. Also Robinson et al. (2005) discussed the positive relationship between the adoption of SFA (sales force automation) technology and performance contingent rewards. Their view was that when salesperson saves effort due to SFA use, he/she can accomplish more work for the same effort, and consequently obtain more rewards. The same logic is likely to apply on the customer knowledge utilization in general. Thus, our current research literature suggests that there would be a positive relationship between the use of performance-contingent rewards (specifically with performance in key customer relationships) and utilization of customer knowledge by the sales personnel. However, to date there is little empirical evidence on this suggestion. Therefore we hypothesize that:

H1: *Customer-relationship related rewards are positively related to customer knowledge utilization*

Employee esprit de corps

Although CRM technologies facilitate knowledge processing activities in many ways, processing of knowledge is at the end up to people in the organizations. Culture and collaborative cultural values have been widely cited as facilitators of more efficient knowledge flows in organizations (e.g. Goh, 2002; Nätti, 2005). Esprit de corps reflects moral and cultural values of employees and thus, willingness of employees to ‘pull together’ (Workman et al. 2003). Such team spirit is likely to increase openness in the organization towards sharing customer-specific knowledge and willingness of employees to share successful and unsuccessful customer experiences with each others. Thus, when people work together and feel committed towards each others they are also more likely to share tacit knowledge, which is difficult to document. As such esprit de corps is close to *learning orientation* that according to the findings by Sinkula (1994) is required to generate, disseminate and interpret information about markets. In their study Jayachandran et al. (2005) found that customer-relationship orientated mind-set has a positive impact on relational information processing (information reciprocity, capture, integration, access, and use). In a similar vein we posit the following hypothesis:

H2: *Esprit de corps among employees involved in key account management has a positive effect on customer knowledge utilization*

Top management involvement

The importance of top management in the management of collaborative key account relationships has been discussed by various authors (e.g., McDonald et al., 2003; Napolitano 1997; Workman et al., 2003). Top management shapes the values of the organization and therefore guides its behavior in a certain direction. Jaworski and Kohli (1993) found that top management support was positively related to market-intelligence generation, dissemination and responsiveness. In a similar vein, top management involvement is likely to affect the utilization of customer knowledge in collaborative key account relationships because top managers communicate the special status of key accounts to the employees and push the organization into utilizing customer-specific knowledge more actively. Top management involvement is essential in that it supports cross-functional co-operation in processing and making use of customer specific knowledge. This is important because in key account relationships different departments (e.g. sales, logistics, production, R & D) have their own direct contacts and experiences with the key account (Kothandaraman and Wilson, 2000) and on the other hand knowledge needs are typically more paramount compared to the management of regular customers (McDonald et al. 2003). Thus:

H3: *Top management involvement has a positive effect on customer knowledge utilization*

RESEARCH DESIGN

The sampling frame comprised Finnish industrial firms with over 200 employees and headquarters in Finland. Firm size was considered an important limitation in the sampling given the presumed higher level of complexity in customer knowledge processing in large firms than in small ones. The sample was drawn from the Amadeus database. On the above terms 361 firms were identified, of which 171 were found to be eligible when contacted by telephone. There were two criteria for determining eligibility that were established in the initial telephone contact: business-to-business sales coordinated from Finland, and the identification of strategically important key account customers. Foreign affiliates were excluded from the sample due to the practical difficulties involved in collecting survey data by means of traditional mail surveys.

The data was collected during spring 2007. First, higher level managers were contacted by telephone in order to ensure the eligibility of the firm to take part in the study and to elicit cooperation. These managers were then asked to recommend one or two of the most knowledgeable persons (key account managers or persons in a corresponding position) responsible for the management of different key account customers as final questionnaire respondents. The questionnaire, with a pre-paid return envelope and a cover letter, was then sent by post to the final respondents based on the recommendations of the higher-level managers. The final respondents had the following job titles: sales manager (37%), key account manager (27%), head of the business unit (13%), sales director (6%) and others such as export manager (17%). The recommendation of the higher-level manager was mentioned in the cover letter in the hope that this would improve the final response rate. A reminder E-mail message was sent to those who had not returned the questionnaire within two weeks.

The respondents were asked to think about a single key account customer when completing the questionnaire. If the respondent was responsible for the management of more than one such customer he or she was asked to think about the largest in terms of annual sales volume. This was considered important because the whole study builds strongly on the view that each key account customer is different, and the way firms treat them and align their organizational structures accordingly might differ depending on the customer. It was therefore postulated that such an approach would increase the validity of the respondents.

Of the 171 firms reached by telephone, 13 refused to participate. The questionnaire was thus sent to 158 participating companies. On the company level, final responses were received from 97 firms, yielding a satisfactory effective response rate of 56.7 per cent (97/171). However, as multiple respondents responsible for the management of different key account customers in each company were asked to take part in the study, 395 questionnaires were sent altogether, and 169 eligible ones were returned, thus yielding a satisfactory effective response rate of 42.8 per cent (169/395) in terms of the total number of questionnaires sent and returned. The number of questionnaires sent to each company varied between one and six. The sample consisted of the following main industrial fields: machinery, electrical and optical equipments (25%), food products, beverages and tobacco (16%), forest industry originated products (18%), and metal and chemical products (18%).

The distribution of the final responses in terms of the geographical scope of the key account was as follows: 38 per cent of the respondents filled in the questionnaire from the perspective of a national key account with no international operations, 28 per cent from the perspective of an international key account with international operations but that had not centralised its purchasing processes on a global basis, and 34 per cent from the perspective of a global key account with globally coordinated purchasing processes. However, only 17% of the respondents stated that they have employees only in Finland; therefore the sample represents mainly firms that are international in nature. Correspondingly, only 10 respondents informed that their market is totally domestic.

According to Armstrong and Overton (1977), possible sources of non-response bias should be located prior to further data analysis. One way of assessing non-response bias is to assume that respondent/non-respondent differences might be manifested to some degree between early and late responses. The reasoning is that later respondents are similar to non-respondents because they presumably have responded because of extra incentives such as reminder cards (Armstrong and Overton (1977)). The average response time in the present study was 20 days, the minimum being seven days and the maximum 69. The sample was divided into early and late respondents, the former taking between zero and 20 days to answer and the latter over 20. The Mann-Whitney test was used to compare the early and late respondents in terms of variables such as annual sales of the company, annual sales of the business unit, and number of company employees. No differences were found.

The use of the key informant approach in collecting data always involves the risk of common method bias (Lindell and Whitney, 2001). This means that a single informant rating all the items in the questionnaire may have a tendency to give answers in a consistent manner. In this case, Harman's one-factor test was used to check the data. Following the recommendations of Podsakoff and Organ (1986), principal component factor analysis was run including all the proposed independent and dependent variables. Common method bias did not seem to be a problem as no single or general factor was found. The inclusion of reverse-coded items in the scales further reduced the risk. Moreover, the dependent variables were separated from the independent variables.

Measures

As no empirically validated items focusing on customer-specific knowledge processing were found in the previous literature, the items applied from previous studies had to be modified to fit the context of this study. In addition, some new items were generated based on a literature review. A principal component analysis with varimax rotation was conducted in order to obtain composite measures for each construct. A seven-point Likert-scale ranging from 'strongly disagree' to 'strongly agree' was used to measure each construct in the model.

Items describing *customer knowledge utilization* were based on the 'information responsiveness' scale developed by Kohli et al. (1993), the 'relational information processing' scale of

Jayachandran et al. (2005), and Moorman's (1995) 'information use' scale. Five items loaded on a single factor and Cronbach's alpha was .83. As a previously validated scale for measuring *customer-relationship-based rewards* did not exist, the items had to be developed based on previous research and pre-discussions with managers. Originally eight items were generated and after the purification of the scale five items loaded on a single factor accounting for 42% of the variance. The Cronbach's alpha for this factor was .66, which is satisfactory for a new, exploratory construct (Hair et al., 1998, 118). *Esprit de corps* was measured with four items assessing the level of team spirit among the employees involved in the management of the key accounts. The items were adapted from the previously validated scale by Workman et al. (2003). Cronbach's alpha for the scale was .74. We adapted our *top management involvement* scale from Workman et al. (2003) and Jayachandran et al. (2005). Some of the original items were eliminated and new ones generated on the basis of previous research and pre-test interviews with sales managers. Four items loaded on a single factor with a satisfactory Cronbach's alpha of .74. The effect of geographical scope of the key account was controlled in the analysis. It was measured with a dummy variable – national – international.

Hypothesis testing

Altogether 167 cases were included in the analysis as two cases were rejected due to missing values. The research hypotheses were tested by means of hierarchical multiple regression analysis. The variables were entered into the equation in two blocks: control variable was entered in the first block and hypothesized independent variables and their interactions in the second block. Interactions were entered into the model because of the lack of previous empirical research and thus, explorative nature of the study. The means, standard deviations and correlations for the variables are presented in Table I. The values of the variable inflation factor (VIF) were computed for each variable in order to check for multicollinearity: they were all substantially below the rule-of-thumb cut-off value of 10 suggested by Hair et al. (1998). There were no violations of the regression analysis as the skewness and kurtosis statistics were well within the boundaries of normality. The results of the analysis are presented in Table II.

Table I. Correlations

Variable	Mean (SD)	1	2	3	4	5
1. Customer knowledge utilization	4.43 (1.10)	1.000				
2. Geographical scope of KA	.67 (.47)	.034	1.000			
3. Top management involvement	4.64 (1.24)	.288	.023	1.000		
4. Esprit de corps	4.89 (.96)	.417	-.033	.320	1.000	
5. Rewards	3.29 (1.15)	.401	.011	.259	.212	1.000

Table II. Results of hierarchical regression

Dependent variable: customer knowledge utilization

Variable	Model 1 Standardized Coefficients	Model 2 Standardized Coefficients
Geographical scope of the KA	.034	.031
Rewards		.295***
Esprit de corps		.330***
Top management involvement		.111
Top involv. X Esprit de corps		-.152*
Top involv. X Rewards		.037
Esprit de corps x Rewards		.012
R2	.001	.309***
Adjusted R2		.278
Change in R2		.307***

*p<0.05, **p<0.01, ***p<0.001 (n=167)

The results of the regression analysis show that geographical scope of the key account as a control variable was not related to utilization of customer knowledge. Our findings gave support for hypothesis H1 and H2 stating that customer relationship based rewards and esprit de corps would be positively related to customer knowledge utilization. Opposed to our expectations, hypothesis H3 stating that top management involvement is positively related to customer knowledge utilization did not receive support and had to be rejected. Although it had a positive sign ($\beta=.111$), the relationship was not statistically significant. Finally, the interaction between top management involvement and esprit de corps was found statistically significant ($\beta=-.152$, $p<0.05$). This interaction is depicted in Figure 1, which shows that the effect of esprit de corps on customer knowledge utilization is stronger when top management is not involved in key

customer relationship. Vice versa, when top management is involved in customer relationships, esprit de corps has a lesser role in predicting the customer knowledge utilization.

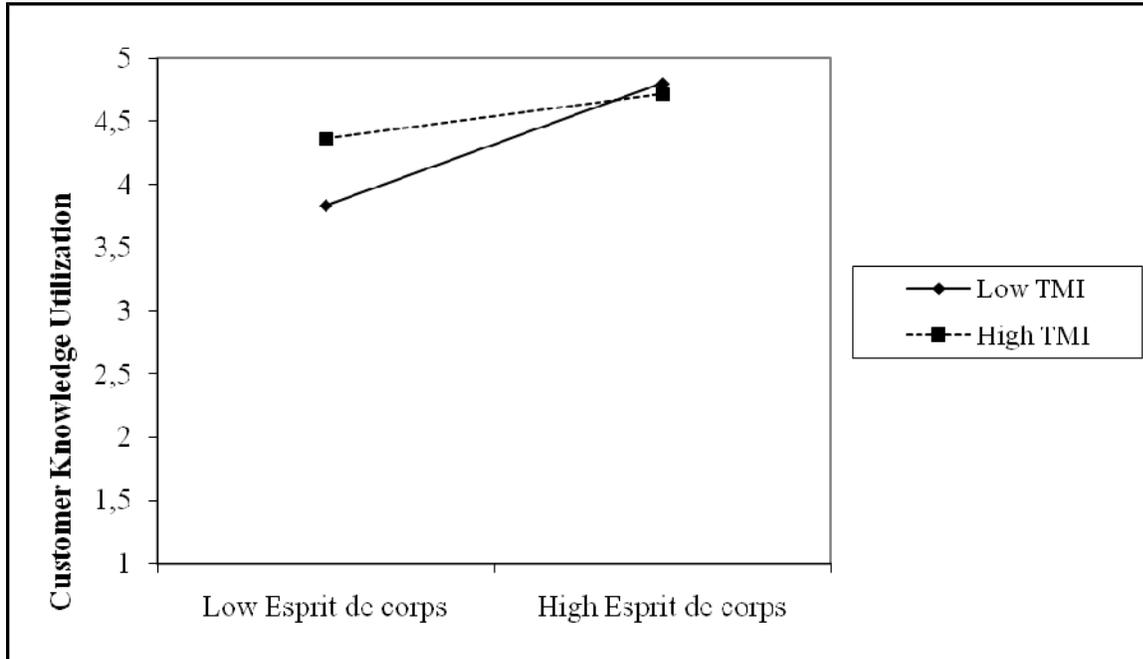


Figure 1. Interaction of Top Management involvement and Esprit de Corps.

DISCUSSION

This paper contributes to previous research on key account management firstly by linking customer knowledge management stream of research to key account management literature. Although some contributions from this view has been provided for example by Nätti (2005) and Nätti et al. (2006), this is one of the first studies in which customer knowledge utilization in key account management context is examined based on quantitative, empirical data. The second main contribution of the paper is related to the increase of knowledge on the motivational factors that enhance customer knowledge utilization in large industrial key account organizations.

Interestingly, it appears from our study that the use of customer-relationship oriented rewards in key account organizations is likely to increase the level of customer knowledge utilization. This finding implies that when sales personnel's rewards are tied to customer-specific targets, the sales personnel is more likely to allocate their time and effort more efficiently for serving certain customers. Thus, customer-relationship specific targets and rewards motivate employees to use more time and resources in order to make the key account relationship successful in the long-term. As such the finding supports prior studies (e.g. Day, 2003; Reinartz et al., 2004) addressing the importance of customer relationship-based rewards in enhancing customer relationship orientation and building customer-focused organizations.

In line with the results of previous studies (e.g. Goh, 2002; Jayachandran et al., 2005; Nätti, 2005) our findings provide empirical support for the positive relationship between collaborative cultural values of the organization and customer knowledge utilization. Our results show that esprit de corps among employees is the strongest factor explaining customer knowledge utilization in our model. Thus, commitment to common goals and responsibility to others is likely to increase customer knowledge utilization in large key account organizations.

Surprisingly our findings do not provide support for the hypothesized positive relationship between top management involvement and customer knowledge utilization. In fact, the findings show that top management involvement has a negative pure moderating effect on the relationship between esprit de corps and customer knowledge utilization. There are alternative potential explanations for this exploratory finding. First, it may be that if top management is highly involved in the management of relationships with key customers there is a little need to assess the sales processes and relationships strategies at KAM team level regularly, which would show in a non-significant effect of top management involvement on customer knowledge utilization. It would also explain the finding that top management moderates the effect of esprit de corps on knowledge utilization, since probably the customer knowledge would be utilized at the top management level and not at the team level. Second, it is possible that the role of esprit de corps in predicting customer knowledge utilization becomes very important when top management is not involved in KAM activities. If key account manager is left alone with his/her team in dealing with key accounts, the use of customer knowledge would be highly dependent on this manager's success in creating a team spirit, which fosters cooperation and knowledge utilization in managing the key account relationship.

The moderating effect of top management involvement to the relationship between esprit de corps and customer knowledge utilization could be interpreted so that when employees of the account are given more freedom to manage the account (equaling less top management involvement) they take the responsibility of the account as a whole and also see the importance of customer knowledge utilization as part of this process. This would imply that too strong hands-on top management involvement would diminish the initiative of employees to utilize customer knowledge, since they would then assume that utilizing customer knowledge belongs to the territory of top management.

Managerial implications

Our findings raise important issues to be considered, if one wishes to promote customer knowledge utilization in one's organization. Based on our results it seems that the main motivational drivers of customer knowledge utilization in KAM teams are good team spirit (esprit de corps) and rewards and incentives that are compatible with customer relationship based strategy and targets. Esprit de corps is a strong antecedent of customer knowledge utilization, and therefore managers should put their effort in creating a work culture that truly appreciates the key customers' importance. However, since work culture is something that cannot be created or changed rapidly, the use of key account based rewards and incentives might provide a faster track into successful use of this knowledge.

Interestingly and contrary to existing literature, the top management involvement does not seem to be a key driver of customer knowledge utilization at the key account management team level. In fact, it may even reduce the positive effect of esprit de corps on customer knowledge utilization at the team level. It may be that unless the top management actively participates in managing the relationships with key accounts, it is a better option to promote customer knowledge utilization by administering rewards and incentives and empowering the key account managers to use their own judgment in customer relationships.

Limitations and suggestions for future research

Since this study contains many exploratory elements and the design is cross-sectional, the interpretation of the regression results, and the making of conclusions regarding the causal relationships should be done with caution. For example, enhanced customer knowledge utilization could also be a driver of other beneficial effects in the organization, such as increase in esprit de corps and applying customer relationship-based rewards. It should be accepted that customer knowledge utilization is a dynamic phenomenon, requiring longitudinal studies.

Most of the firms in the sample are truly international firms serving geographically extensive accounts. Therefore, the findings could be generalized to other large industrial firms in Western industrialized countries with similar infrastructure. However, this study did not control firm size. Also the geographical scope of the key account was measured as a categorical dummy variable. Thus, the effect of firm size and degree of internationalization could be examined in more detail, as these factors may have some effect on the studied motivational determinants. In the questionnaire of this study the respondents were not asked to compare their KAM activities to the way they manage the so-called regular customers. As such, therefore, this research does not establish whether customer knowledge is utilized differently in the management of key accounts compared to regular accounts. This study utilized a single multi-item scale for measuring customer knowledge utilization. In the future this item could be further developed to include the differences between knowledge-enhancing and action-oriented use of the knowledge, so that the various purposes of knowledge use would be better differentiated. Moreover, future studies could also examine in more detail other factors possibly facilitating the use of key account-related knowledge. For example, one could examine the skills and characteristics of key account managers or structural factors, such as the effect of key account team use on customer knowledge utilization.

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APPENDIX I

Scale items and reliability estimates

	Loadings
Customer knowledge utilization (Cronbach's alpha=0.83)	
We constantly assess our key account relationships strategy with the help of new key account-related knowledge	0.836
We regularly assess our sales processes to make sure they meet the key account's expectations	0.810
We exploit key account-related knowledge actively in developing new value-added solutions to the key account	0.801
We continually exploit the key account-related knowledge when assessing our successes and failures in managing the key account relationship	0.703
We use key account-related knowledge to forecast the development of the key account's business	0.697
Customer relationship-based rewarding (Cronbach's alpha=0.66)	
Reward systems encourage employees to focus on increasing key account satisfaction	0.745
People get recognized for being sensitive to key account customers' moves	0.661
Formal rewards (i.e. pay rises, promotions) are forthcoming to anyone who consistently provides good key account customer intelligence	0.659
Key account managers' salaries are not dependent on the state of key account relationships	0.658
Key account managers' performance is evaluated based on key account profitability	0.528
Top management involvement (Cronbach's alpha=0.74)	
Top management often deals with the management of the key account relationship	0.848
Our top management have close relations with the key account's top management	0.790
Our top management encourages employees to pay special attention to the key account relationship	0.669
The key account manager is often left alone when key-account related decisions need to be done (R)	0.605
Esprit de corps (Cronbach's alpha=0.74)	
<i>The people involved in the management of the key account relationship..</i>	
Have a team spirit that pervades all ranks involved	0.918
Feel like they are part of a big family	0.781
Are genuinely concerned about the needs and problems of each other	0.732
View themselves as independent individuals who have to tolerate each others around them (R)	0.572